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REPORT ON THE QUALITY OF MARINE SURFACE OBSERVATIONS FOR THE PERIOD JANUARY TO JUNE 1998.

REPORT NO. 19

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JANUARY TO JUNE 1998

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1. INTRODUCTION

In 1985, the Commission for Basic Systems agreed that there was a need for GDPS / Global NWP centres to monitor the quality of observations available on the GTS and to exchange monthly lists of those stations providing observations which seem in error. In 1988 three lead centres were nominated which would have a co-ordinating role of producing, at 6-monthly intervals, consolidated lists of suspect stations for given data types together with information on the nature of the error. RSMC Bracknell was allocated the rôle as lead centre for marine surface observations which encompasses observations from ships, drifting buoys, moored buoys and other fixed marine platforms. This is the nineteenth such report and covers the period January to June 1998.

Following the CBS recommendations, four centres have been active in exchanging monitoring information each month; RSMC Bracknell since August 1987, ECMWF since August 1988, RSMC Tokyo since September 1988 and NCEP Washington since August 1989. At first, the only monitoring information exchanged on marine surface observations was related to pressure, and the first two WMO reports were restricted to that parameter alone. All four centres now regularly monitor wind observations and results are contained in this report. In addition, the report contains monitoring results for sea-surface temperature (SST). For each marine observing platform identified as suspect, values are supplied for the number of observations received at each centre, the number of observations with gross errors, and the mean and rms differences from the background values used by the numerical data assimilation system.

2. MONITORING METHODS

Errors in observations may arise from a number of sources: the instrument may be malfunctioning, figures may be mistaken while being transferred manually, or there may be corruption of data during transmission. Errors can also arise in the pressure report if the adjustment to sea level is made incorrectly or not at all, and a poorly-sighted anemometer can result in errors in the observations of wind. For SST observations, the depth at which the observation is made can be crucial. "Surface" observations from buoys are usually made at a depth of around 0.5m, whereas ships may take a measurement between a depth of 10m and the surface, depending on the method used. At present, there is no indication given within the report of the observation's depth, so it is not possible to determine the significance of this factor. (By contrast, satellites measure the temperature of the ocean's "skin" which is generally slightly cooler than the temperature immediately beneath, by several tenths of a °C, as a result of evaporative cooling and other surface processes.) Some of these errors can be detected by applying checks on the code format and the internal consistency of the report (for example: are the position and pressure consistent with a report 6 hours earlier?). Checks on spatial consistency may be made if there are other nearby observations. However, such quality checks are unable to identify errors on all occasions and it is recognised that the numerical data assimilation systems in use today can provide global reference values which have a valuable application in the area of observation monitoring. The short-term forecast from the previous numerical analysis, commonly known as the first-guess or background field, provides perhaps the most useful information on observation quality, as it represents an accurate and spatially consistent estimate of the observed value which is independent of the observation itself. Observation-minus-background (hereafter referred to as O-B) differences are at the centre of all monitoring work by GDPS centres. For sea-surface temperature, it is not possible to use a background field with which to compare the observed value, as for wind and pressure observations, because no forecast of SST is performed at Bracknell. Instead, the analysis field is used. SST changes only slowly relative to parameters above the surface, thus this is a good enough approximation. Analyses are performed daily at RSMC Bracknell from an assimilation of both surface and satellite observations. There is one drawback in using the analysis field as an

alternative: it is not independent of the observations themselves. This is a major limitation when it comes to assessing observation quality since the results are not straightforward to interpret.

Taking all marine surface observations together, the values of O-B have distinct characteristics. The vast majority of the observations show quite small departures from background and the distribution of O-B is nearly Gaussian, with little or no bias. The errors in the background field probably contribute most to the values of O-B for these observations. There is, however, often a smaller group of observations departing much more from background, for which observation error is the only reasonable explanation for the large values of O-B. Studies of the distribution of O-B and its variation at different points around the globe enable reasonably accurate estimates of background error to be made, and this provides the basis for the monitoring methods described here. Those marine observing platforms for which, in a sufficiently large sample, the observed values of pressure or wind differ from the background by an amount significantly in excess of the estimate of background error, may be labelled as suspect with a high degree of confidence. The limits used here to identify suspect observing platforms have been set sufficiently stringent to preclude much likelihood of the background, rather than the observations, being in error.

Each monitoring centre produces a monthly list of the identifiers of marine observing platforms considered suspect according to the departure from the centre's background values. All observations, both synoptic and asynoptic, are assimilated. At Bracknell, Tokyo and Washington, the corresponding background value used is that valid at the nearest main synoptic hour. At ECMWF, however, interpolation in time is performed.

Given that the number of observations made during the month is greater than or equal to 20, then the condition used by all centres for obtaining platforms for the suspect lists is that at least one of the following criteria are satisfied:

Pressure

1. the | mean of O-B |	$\geq$ 4.0 hPa	
2. the standard deviation of O-B	$\geq$ 6.0 hPa	
3. the percentage of gross errors	$\geq$ 25	

Wind

1. the | mean of O-B |	$\geq$ 5.0 ms^{-1}	(Speed)
	$\geq$ 30°	(Direction)
2. the standard deviation of O-B	$\geq$ 80°	(Direction)
3. the percentage of gross errors	$\geq$ 25	

A gross error is defined as an observation which departs from the background by more than 15hPa (Pressure) or 25ms^{-1} (Vector Wind). The mean and standard deviation of the samples are evaluated excluding gross errors and in this way occasional "wild" values resulting from, for example, corruption during transmission, do not influence the sample characteristics. Direction statistics are also calculated excluding values in light winds, where either the observed or background speed is less than 5ms^{-1}.

Relatively little information is exchanged between centres on a regular monthly basis for SST.

The monthly results for pressure from all four monitoring centres show considerable agreement, both on the observing platforms listed as suspect and the values of the mean and rms difference from each centre's background. Differences between the monthly suspect lists are usually due to the different numbers of observations available at each centre. The cut-off varies between 6 and 24 hours. There are also some unexplained variations in the data receipt between the centres, which may be due to problems in the GTS or in the local procedures for handling the data. Monitoring results for wind speed also show reasonable agreement on the mean and standard deviation from

each centre's background; there is less agreement as to which platforms are listed, reflecting the greater uncertainty when monitoring wind speed.

This report draws together all the monthly monitoring results exchanged on marine surface data and identifies a list of observing platforms which have provided observations of poor quality over the 6-month period. In drawing-up this list, there have been a number of guiding principles:

1. As with the monthly lists, accuracy is assessed relative to background values.
2. Only those observing platforms are listed for which there is a very high degree of confidence that the observations rather than the background values are in error.
3. At least 40 reports are required over the period in which the observations are considered suspect.
4. The perceived accuracy over the last part of the six-month period is of greatest importance; observing platforms will not be listed if there has been recent improvement and their reports are at present without major error.
5. Given that the number of observations made during the period is greater than or equal to 40, then the condition for listing a platform as suspect in this report is that at least one of the following criteria are satisfied:

Pressure

1. the | mean of O-B |	≥ 3.5 hPa	
2. the standard deviation of O-B	≥ 5.0 hPa	
3. the percentage of gross errors	≥ 25	

Wind

1. the | mean of O-B |	≥ 5.0 ms^{-1}	(Speed)
	≥ 30°	(Direction)
2. the standard deviation of O-B	≥ 6.0 ms^{-1}	(Speed)
	≥ 60°	(Direction)
3. the percentage of gross errors	≥ 25	

SST

1. the RMS of O-A	≥ 2.5 °C
2. the percentage of gross errors	≥ 25

The same gross error limits apply in this report as for the monthly lists, with the limit for SST being set at 5°C. All observations having gross errors are excluded from the calculation of the mean and standard deviation of O-B and O-A.

The limits set on the bias and standard deviation of O-B are slightly less stringent than those for the monthly lists because the sample sizes are larger. They are only applied over the last part of the period if there has been a recent deterioration in quality. It is possible that there are a few observing platforms listed in this report which have not appeared on any of the monthly lists. This can occur if they report infrequently and only produce a large enough sample over a period of several months. The 6 -month list is longer than most of the monthly lists because many ships cease reporting for variable periods of time, presumably in most cases while they are in port or out of service. Only over a relatively long period, probably more than 6 months, is a representative sample obtained from all those ships providing observations.

3. MONITORING RESULTS

The monitoring results presented in this report relate only to data exchanged over the GTS. Observations from marine platforms are transmitted in one of two formats: the SHIP code, used for most observations from ships, moored buoys and other fixed platforms, and the BUOY code, used mostly for observations from drifting buoys. In this report the term "ship observations" refers to those received in the SHIP code and the "drifting buoy observations" to those received in BUOY code. The SHIP code indicates whether the observation was made manually or by an automatic system and accordingly the sub-divisions "manual ship" and "automatic ship" will be defined.
N. B. Due to changes in the observation processing system at Bracknell and consequent changes to the data bases used for monitoring, the period of this report is not the full 6 months. For pressure and wind statistics the period is 5 months, from February to June 1998; and for sea surface temperature statistics the period of the report is only 4 months, from January to April 1998.

3.1 Pressure

In the five-month period February-June 1998, 1,284,977 observations of pressure were monitored at Bracknell from 4868 manual ships, 407 drifting buoys, and 246 automatic ships. The number of reports received from individual ships varies greatly as Table 1 demonstrates; apparently, a large percentage only report once. The reason for this is unclear but it may be a result of errors in the part of the message giving the ship identifier. A comparison with the corresponding table in report number 18, shows that the number of manual and automatic ship identifiers has decreased, which is partly due to the shorter period being looked at; but, despite this, the number of drifting buoys has increased, although the total number of reports has decreased. There will inevitably be some seasonal variation in the number of vessels reporting, as the deployment of new/replacement buoys will generally be done in better weather conditions.

Table 2 shows the number of observations of pressure that have been received over the GTS at Bracknell and processed, for past 6-month periods. Due to changes in data storage methods at Bracknell in May 1991, report number 5 covered the period January to May 1991 only, thence figures for January-June 1991 have been scaled-up in order to make a fair comparison with other 6-month periods; this may not be entirely accurate. Further changes in November 1993 for drifting buoys and automatic ships for pressure and winds, may have allowed duplication of a few identifiers in Table 1 for the period June to December 1993, as reclassification from one observation type to another occurred. The observation distribution shown in Table 2 will also have been affected in the long term with a slight shift towards drifting buoys; no duplication of observations occurred however. SST observations were not affected by the November 1993 change. The period January to June 1998 is also based on only 5 months data (February-June), but the numbers of observations received have been scaled up for comparison with the other 6-month periods.

Figure 1 shows the information presented in Table 2 more clearly. It can be seen that the total number of observations remained fairly steady with only minor fluctuations until report number 11 (January-June 1994). Since that time however, there has been a steady increase in the total, with the number of observations of pressure nearly doubling between reports 11 and 16 (July-December 1996), a period of just 2.5 years. This increase was due to the increase in the number of reports from each drifting buoy, as reliability has improved; many drifting buoys now make over 2,000 pressure observations during a 6-month period. The number of reports from drifting buoys now exceeds those for manual ships by around 50%, with about half of all marine pressure observations now being made by drifting buoys. The sudden increase seen in the number of automatic ships in report number 19 (January-June 1998) is due to observation processing changes at Bracknell, whereby all reports from 'automatic ships' are now processed, rather than only one report per 6-hour assimilation period.

A histogram of O-B differences for all ship pressure reports in the period February to June 1998 is shown in Figure 2a, together with the Gaussian distribution with the same mean and standard deviation. Although almost all values fall within the range +5 to -5 hPa, a small number of much

larger values, presumably resulting from erroneous observations, contribute to the large standard deviation of the population. The distribution for all those observations which fail the automatic quality-control checks is broad (Figure 2b). The remaining 94 per cent of the observations which pass the quality checks show a distribution of O-B which is very close to Gaussian (Figure 2c) with mean -0.1 hPa and standard deviation 1.5 hPa; the principal contribution to the standard deviation is assumed to be from background errors.

A global estimate of the background error, such as is provided above, will conceal large spatial variations which may occur. Background values will be more accurate in data-rich areas (e.g.: in the North Sea or Mediterranean) or where the meteorological variability is low (e.g.: the tropics). The geographical distributions of the mean and standard deviation of the values of O-B from all ship observations which pass the quality-control checks, have been calculated for 10-degree latitude-longitude boxes and are plotted in Figures 3 and 4. In most areas the magnitude of the mean is less than 0.5 hPa, the exceptions being generally where the sample size is small. The standard deviation is generally around 1.5 hPa, but larger in the southern oceans, around 2.5 hPa. The number of ship pressure reports accepted by the model quality control in each 10-degree box is shown in Figure 5.

Table 3 contains a list of those ships and drifting buoys considered to have produced suspect observations of pressure in the period February to June 1998. Values over the 5-month period are given for the number of observations of pressure available for the Bracknell global model runs, the number of observations differing from the background value by more than 15 hPa (gross errors), and the mean and standard deviation of O-B using the Bracknell global model. The number of times the identifier has appeared on the monthly suspect lists from the four monitoring centres is also given. In order to give a detailed picture of the frequency of reporting and any changes in the observation accuracy, 5-month time-series of O-B differences are given at the end of the report for each of the identifiers listed.

An interesting characteristic of the errors identified here, which soon becomes obvious on inspection of the time-series charts at the end of this report, is that most can be attributed to a bias in the observed pressure. In many cases the bias is constant over the whole monitoring period. There are some values which appear to depart greatly from the sample mean, presumably due to some gross error in the observation, but generally they are isolated instances. In only a few cases are there regular large random departures from background. Those observing platforms listed in Table 3 which appeared in the eighteenth report (July to December 1997) have been indicated with an asterisk. A comparison of the statistics given here with those in the seventeenth report (January to June 1997), clearly indicates that the bias in the pressure observations from a few ships has hardly changed for more than a year.

Statistics for those marine observing platforms which were listed in the eighteenth 6-monthly report and which do not appear in Table 3b, are given in Table 4 along with comments on the quality of their pressure observations. Time-series charts of the pressure observations from these platforms are not given. Less than 40 reports were received in the 5-month period for a majority of the ships on this list. However, nearly 40% of the ships show some improvement in the quality of their observations.

3.2 Wind

The monitoring of observations of wind, presents more problems than for pressure. On the majority of observing platforms, wind is measured using anemometers. The reported speed will be dependent on the averaging period and the height of the instrument above sea level, which will vary a great deal from platform to platform. The wind flow is distorted by a large structure and factors affecting the wind measurement will also include the siting of the anemometer and the bearing of the wind with respect to the structure. Not all winds are measured by anemometers; observations from some ships are based on visual estimates of the sea state and in these cases the factors outlined above do not apply.

In the monitoring results presented here, the background winds are valid at a height of 10 metres above mean sea-level, a little lower than the average height of a ship anemometer. Where the

anemometer height is much different from the reference height, a significant O-B speed bias may be introduced. This will be the case, for example, for observations from oil rigs or tankers with an anemometer height of 50m or more, or from buoys where the anemometer can be as low as 2m.

In the period February to June 1998, 673,510 observations of wind were available for monitoring at Bracknell from 4668 manual ships, 139 drifting buoys, and 314 automatic ships. A more detailed breakdown is given in Table 1. The large increase in number of observations compared with the previous report (543,760), despite there being only 5 months data in this report, is largely due to the inclusion of all 'automatic ship' data, instead of just one report in each 6-hour period. Histograms of O-B differences for ship observations of wind speed are presented in Figures 2d to 2f and of wind direction in Figures 2g to 2j. As with observations of pressure, those wind observations which fail the quality-control checks differ most from background, some by as much as 40ms^{-1}, and they make a large contribution to the variance of O-B. The distributions of O-B wind speed and direction for the remaining 90 per cent of the observations are nearly Gaussian. There is a speed bias of +1.2ms^{-1} relative to background, with a direction bias of just -2.0°.

Figures 6 and 7 show the geographical distributions over the 5-month period of the mean and standard deviation of O-B for ship observations of wind speed which pass the quality-control checks. The numbers of wind reports used to generate these statistics are presented in Figure 8. The standard deviation of O-B wind speed is typically 2.5 to 4ms^{-1} in middle latitudes and 2 to 3ms^{-1} in the tropics. The bias is generally around +1ms^{-1}, but exceeds +2ms^{-1} in a few places. Similar distributions of the mean and standard deviation of O-B wind direction are shown in Figures 9 and 10. Only reports where both the observed and background wind speeds are greater than 5ms^{-1} were used to obtain these values. The magnitude of the bias is less than 10 degrees in most places. The standard deviation is generally between 20 and 30 degrees globally, but in some data-sparse areas it is as large as 40 or 50 degrees. The numbers of reports of wind direction used to generate these statistics are presented in Figure 11.

Figures 6-11 provide reference values against which the characteristics of O-B for different marine observing platforms may be compared. Table 5 contains a list of those ships and drifting buoys considered to have produced suspect observations of wind speed in the period February to June 1998, and in Table 7 a similar list is provided for wind direction. Values are given for the number of observations of wind received at Bracknell, the number of observations having a vector difference from background of more than 25ms^{-1} (gross errors), and the mean and standard deviation of O-B. Time-series of O-B for each identifier listed are given at the end of the report. In most cases of suspect speed observations, a constant bias is clearly evident. Errors in observations of direction are more random in nature. Tables 6 and 8 contain statistics for platforms which are not included in Tables 5 and 7 but that were listed in the previous 6-month report, for wind speed and direction respectively. Time-series plots for these identifiers are not included in this report.

3.3 Sea-surface temperature

In the 4-month period, January to April 1998, a total of 889,547 observations of SST were monitored at Bracknell, from 4046 manual ships, 801 drifting buoys and 332 fixed buoys. Of the total, 236,352 were from ships, 188,013 from fixed buoys and 465,182 from drifting buoys. Table 1 gives the number of reports received from individual identifiers in frequency categories and shows that a large number of ships reported only once during the 4-month period. Errors in reporting the station's identifier could make a significant contribution to this total. Despite there being a relatively small number of buoys, they constitute a substantial percentage of the total number of observations received. This is due to the frequency at which the observations are made: ships usually report only at the main synoptic hours, or less frequently, whereas some buoys report as often as every hour.

Figures 12a, 12b and 12c show the number of observations, mean O-A and standard deviation of O-A for each of the 3 observation types, for both the northern and the southern hemispheres. Only observations passing quality control checks have been used. As in previous reports, Figure 12b shows that the overall bias of each observation type is small (< 0.1°C), with ship observations having a slightly positive bias, whilst fixed buoys have a slightly negative bias; the sign of the bias

for drifting buoys varies with the hemisphere. Figure 12c shows that ship observations are substantially more erratic, with standard deviations of about 1°C being approximately twice those of fixed and drifting buoys. This is partly due to the fact that buoys report frequently and at a quasi-constant location which effectively gives them increased weight in the analysed field.

Figures 13, 14 and 15 respectively show the global distribution of the bias and standard deviation of O-A and the numbers of observations, for ships. The largest biases occur at high latitudes, which is most likely a result of the small number of observations available and hence the decreased reliability of the analysis in these areas, particularly in the southern hemisphere. Figures 16 and 17 show the global distribution of fixed and drifting buoy SST reports. The coverage provided by drifting buoys is extensive, the exception being tropical areas of the Atlantic, and the polar regions. Fixed buoys are largely concentrated in coastal regions, with particularly high observation densities around the UK and the USA, as well as Japan and Hawaii. A number of 10° x 10° grid boxes contain less than 5 reports; this situation may have arisen from reports containing erroneous positions.

Table 9 contains a list of the ships and drifting buoys considered to have produced suspect observations over the 4-month period. The comments given in each case provide an indication of the main reason for the station to be listed as suspect; time-series charts have also been plotted for SST and are included at the end of the report. A large number of the identifiers appearing on the list do so as a result of a persistent bias, and some of those listed due to the number of gross errors, also show a large bias. Table 10 gives details of the performance over the latest 4-month period of ships which were considered suspect in the previous 6-month period but which do not appear in Table 9. It shows that 27 ships have shown an improvement in the accuracy of their SST measurements during the 4 months.

4. SUMMARY

74 marine observing platforms are listed as producing suspect observations of pressure over the period February to June 1998, and 29 as producing suspect wind observations; with 89 platforms listed as producing suspect SST observations over the period January to April 1998. The first report issued by RSMC Bracknell for the period January to June 1989, listed 150 marine platforms producing suspect observations of pressure. The selection criteria have remained unchanged, and the steady reduction in the number of platforms listed seems to reflect a genuine improvement in quality over the period.

The most common characteristic of the pressure errors found here is a bias in the reported pressure which may remain constant for many months. The majority of platforms listed as producing suspect wind observations show a bias in the reported wind speed, while a few show a large standard deviation in wind direction. For sea-surface temperature observations, the presence of a persistent bias is again found to be the most common cause of error.

The selection criteria have been set sufficiently stringent to ensure that the platforms listed are only those for which there is a high degree of confidence in their reports having errors. There are a great many others, not listed here, for which there must be considerable doubt over the quality of the observations. A wider range of monitoring results are available from Bracknell on request.

TABLE 1: FREQUENCY DISTRIBUTION OF THE NUMBER OF REPORTS OF PRESSURE, WIND AND SEA SURFACE TEMPERATURE FROM INDIVIDUAL IDENTIFIERS AVAILABLE FOR MONITORING AT BRACKNELL, JANUARY TO JUNE 1998.

Number of reports	Number of manual ships reporting			Number of drifting buoys reporting			Number of automatic ships reporting		
	Press	Wind	SST	Press	Wind	SST	Press	Wind	SST*
1	1904	991	1403	34	28	3	134	103	5
2-10	624	1135	580	25	32	15	13	54	156
11-20	256	231	259	11	11	11	3	6	21
21-40	388	377	394	18	10	27	3	3	30
41-100	666	657	622	19	8	29	9	12	12
101-200	580	583	516	25	2	96	13	13	6
201-500	392	599	231	69	16	364	22	41	17
501-1000	41	72	25	98	14	136	25	54	10
1001-1500	19	22	0	72	10	61	13	15	11
1501 +	1	1	14	36	8	59	11	13	64
Total	4868	4668	4046	407	139	801	246	314	332
(Report 18)	*(5858)*	*(5208)*	*(5460)*	*(358)*	*(107)*	*(894)*	*(437)*	*(448)*	*(387)*

* numbers are for automatic (fixed) buoys only

TABLE 2: NUMBER OF OBSERVATIONS OF PRESSURE RECEIVED AT BRACKNELL ON THE GTS FOR EACH OF THE SIX-MONTH PERIODS COVERED BY THE WMO REPORTS ON THE QUALITY OF MARINE OBSERVATIONS

Period	WMO report number	Number of Observations			
		Manual ships	Drifting buoys	Automatic ships	Total
Jan-Jun 1989	1	424087	174971	40082	639140
Jul-Dec 1989	2	421315	151972	58016	631303
Jan-Jun 1990	3	424335	177927	63847	666109
Jul-Dec 1990	4	412430	205488	71146	689064
Jan-Jun 1991	5	364760	177069	64401	606230
Jul-Dec 1991	6	348710	148604	68456	565770
Jan-Jun 1992	7	332443	216872	73893	623208
Jul-Dec 1992	8	336958	247873	80862	665693
Jan-Jun 1993	9	340293	288208	77317	705818
Jul-Dec 1993	10	348082	316261	88650	752993
Jan-Jun 1994	11	334134	279963	111928	726025
Jul-Dec 1994	12	383760	305618	142468	831846
Jan-Jun 1995	13	369781	407111	124537	901429
Jul-Dec 1995	14	394016	528938	138653	1061607
Jan-Jun 1996	15	430162	566035	122909	1119106
Jul-Dec 1996	16	477928	621869	133221	1233018
Jan-Jun 1997	17	446530	623835	122178	1192543
Jul-Dec 1997	18	453399	684292	140227	1277918
Jan-Jun 1998	19	426622	700743	423217	1550582

TABLE 3: LIST OF MARINE OBSERVING PLATFORMS REPORTING SUSPECT PRESSURE OBSERVATIONS OVER THE PERIOD FEBRUARY TO JUNE 1998.

Column 1 Call sign or identifier.

Column 2 Number of pressure observations available for monitoring over the 5-month period, excluding duplicates, but including any observations with gross errors.

Column 3 Number of pressure observations differing by more than 15 hPa from background (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Columns 6-9 Number of times observing platform has appeared on suspect lists. B=Bracknell, E=ECMWF, T=Tokyo, W=Washington.

Column 10 Comments on quality of pressure observations.

Notes:

1. Units are hPa.
2. Observing platforms marked with an asterisk were listed in the previous report (July to December 1997)

Table 3a: Platforms reporting in BUOY code

*i): Platforms **non-operational** at the end of the reporting period*

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
23948	58	58	****	****	1	1	0	1	Gross errors
31527	168	16	5.1	-2.0	2	2	2	2	Standard deviation
31530	153	149	1.5	-12.6	2	2	1	2	Gross errors
33505	194	178	4.4	-9.2	2	2	2	2	Gross errors
33574	282	4	3.1	5.1	2	2	2	2	Bias
33578	706	45	4.1	-0.9	1	1	1	1	Standard deviation 6hPa May
46905	459	152	6.0	2.6	2	2	0	2	Standard deviation
47543	77	0	4.6	-5.5	1	1	0	1	Bias
47550	407	0	5.7	1.2	0	1	1	1	Standard deviation
51682	396	181	1.5	-0.4	1	1	1	1	Gross errors
54928	1029	57	4.3	-6.5	4	3	3	3	Bias drift
62927	79	20	2.2	-0.1	1	1	1	1	Gross errors
63662	72	67	3.6	8.9	1	1	0	1	Gross errors; erratic
73509	166	165	***	***	1	1	0	0	Gross errors
74532	184	161	2.1	-12.2	1	1	1	1	Gross errors

*ii): Platforms **operational** at the end of the reporting period*

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
17511	968	0	3.4	-3.1	2	2	1	1	Bias drift: -7hPa in June
33572	969	13	2.9	3.0	1	1	2	2	Bias drift: 6hPa in May
54920	969	235	2.4	0.3	2	2	2	2	Gross errors from May
54931	1365	8	4.2	2.3	1	2	2	3	Standard deviation 6hPa May

Table 3b: Platforms reporting in SHIP code

Ident.		N Obs.	NGE	SD	Bias	B	E	T	W	Comments
CYLX	*	36	36	****	****	1	0	0	1	Gross errors
C6BJ9		113	0	0.9	3.4	0	0	0	0	Bias
C6FA6	*	105	0	0.9	-6.2	2	2	3	4	Bias
C6HQ05		42	1	1.0	-5.8	1	0	1	1	Bias
C6HQ06		46	1	1.1	-5.6	1	1	1	1	Bias
C6IL3		44	1	2.3	4.6	1	1	1	1	Bias
DUWH		460	8	1.9	-4.3	3	2	0	2	Bias
ELTE6		211	0	1.4	-4.7	3	3	3	4	Bias
ELTQ9		106	13	3.2	3.8	1	1	1	1	Bias
ELUB5		402	24	5.5	3.2	2	1	1	2	Standard deviation
KSLB	*	59	0	1.1	-4.3	0	0	1	1	Bias
LAXP		41	0	1.7	-3.6	0	0	0	0	Bias
MVQN	*	44	0	1.2	-4.0	0	0	0	0	Bias
MVQN8	*	99	6	8.7	3.4	2	1	2	1	Bias: +12 to -4 from March
MWZD2		86	0	1.9	5.3	2	2	1	1	Bias
MXYR3		52	0	2.4	-3.8	0	0	0	0	Bias
OXPW		96	0	5.0	-4.6	1	1	1	1	Bias from June
PCBU		48	20	1.3	11.7	1	1	1	1	Bias and gross errors
PCCZ		43	0	1.3	4.7	1	1	1	1	Bias
PCEX		105	0	3.9	4.0	1	1	1	1	Bias
PEUQ		92	0	1.3	-5.8	2	2	2	2	Bias
UAMS		151	9	3.6	-3.6	2	2	2	2	Bias; rather erratic
UAMY		59	34	4.2	-4.6	2	2	2	2	Gross errors and bias
UCAC	*	27	0	1.9	5.3	0	0	0	0	Bias
UCJR		130	0	2.2	3.5	2	2	2	2	Bias
UCUF		42	2	2.9	6.4	1	1	1	1	Bias
UDYN		58	10	5.3	2.7	1	0	1	1	Standard Deviation
UJNC		42	0	2.7	4.0	0	0	0	0	Bias
UQDB	*	59	38	4.2	-6.3	1	2	2	2	Bias
USIS		177	0	1.2	3.5	0	0	0	0	Bias
VCJM		53	51	5.1	-3.9	1	1	0	1	Gross errors; bias
VCPK		46	19	5.4	-4.1	1	0	0	2	Gross errors; bias
VCTV	*	49	32	6.5	-5.7	1	0	0	0	Gross errors; bias
VGKM		55	36	4.4	-5.9	2	0	0	2	Gross errors; bias
VGMV		57	37	3.5	-10.7	2	0	0	2	Gross errors; bias
VRUS7	*	74	0	2.8	6.6	2	2	3	2	Bias
VTCND		57	9	6.7	-3.7	0	0	0	0	Bias and standard deviation
VVGG		58	0	2.4	4.6	0	0	3	1	Bias
V2XO	*	196	2	1.8	-6.8	4	0	0	5	Bias
V7AS7	*	47	4	1.3	11.9	2	2	2	2	Bias

Continued →

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
V7AW8 *	140	1	1.4	4.1	3	3	2	1	Bias
WCV7620	169	1	2.4	3.6	1	0	0	1	Bias
WDZB *	180	1	1.5	-5.1	4	0	3	4	Bias
WFLH	228	0	1.5	-3.7	1	0	0	1	Bias
WRGL	68	0	2.3	4.9	2	1	2	2	Bias
XLW363	53	0	1.1	4.4	1	1	1	1	Bias
XYKX	53	14	5.8	0.1	0	0	1	0	Gross errors
3FGN3 *	76	8	3.5	-5.6	2	3	3	3	Bias
3FTJ4 *	34	0	1.5	10.7	0	0	0	0	Bias
3FUD4	95	0	1.5	-4.2	1	1	1	2	Bias
3FUQ7	71	1	1.8	4.8	1	1	2	1	Bias
9VHU *	40	3	1.5	7.0	0	0	2	0	Bias
9VIH *	58	0	1.7	-6.0	2	2	1	2	Bias
9VPK *	64	2	1.5	8.7	2	2	2	2	Bias
9WCR3	53	1	4.1	-4.3	1	1	0	1	Bias

TABLE 4: LIST OF PLATFORMS REPORTING IN SHIP CODE NOT APPEARING IN TABLE 3 BUT LISTED AS SUSPECT OVER THE PERIOD JULY TO DECEMBER 1997.

Column 1 Call sign or identifier.

Column 2 Number of pressure observations available for monitoring over the 5-month period, excluding duplicates, but including any observations with gross errors.

Column 3 Number of pressure observations differing by more than 15 hPa from background (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Column 6 Comments on quality of pressure observations.

Notes: 1. Units are hPa.

Ident.	N Obs.	NGE	SD	Bias	Comments
CG2248	165	111	2.2	1.5	Bias -20hPa improved in June
CTFS	0				No reports
CYBJ	0				No reports
CYGR	0				No reports
DNHS	98	0	1.1	0.5	Bias reduced in May
DOWVD2	0				No reports
ELJS4	0				No reports
ELNW7	53	26	1.5	-3.0	Bias reduced in March
ELSU8	250	9	1.8	-0.3	Bias removed in Feb
ELUO3	22	0	1.6	4.7	Less than 40 reports; bias persists
EQUW	0				No reports
EQUY	0				No reports
EQUZ	0				No reports
EUAF	74	2	7.4	4.2	Bias reduced in April to -3hPa
J8EL6	0				No reports
NYCQ	0				No reports
OZBL2	0				No reports
PEXU	160	1	2.1	-0.5	Bias removed
PEXX	105	0	2.2	-3.3	Bias reduced
P3NE5	10	0	2.2	7.5	Less than 40 reports; bias persists
P3YS5	241	1	2.3	2.4	Bias reduced
UCJL	5	0	0.8	2.8	Less than 40 reports; bias reduced
UCTR	0				No reports
UFYN	129	1	1.9	-3.0	Bias reduced to -3hPa
UHLK	78	0	2.1	-1.0	Bias removed
UHVW	66	0	1.3	3.3	Bias reduced
UITJ	30	2	1.1	-11.2	Less than 40 reports; still biased
VCJW	0				No reports
VCLX	17	1	1.6	0.6	Bias removed

Continued →

Ident.	N Obs.	NGE	SD	Bias	Comments
VCQL	13	0	3.0	-1.4	Less than 40 reports; bias removed
VCRQ	0				No reports
VCTD	85	2	2.6	-1.1	Bias removed
VCTK	0				No reports
VC6750	1	0	0.0	-1.0	Only 1 report
VDDL	0				No reports
VGNW	37	0	1.8	-4.5	Less than 40 reports; still biased
VOXZ	0				No reports
VTCN	21	1	1.5	-11.0	Less than 40 reports; still biased
YJWZ7	101	1	1.4	-0.8	Bias removed
3EIY6	1	1			Only 1 report
3ESE9	27	0	1.2	6.6	Less than 40 reports; still biased
3ESQ5	0				No reports
3FDY6	116	0	3.6	3.3	Bias removed from April
3FKZ3	2	0	0.8	6.1	Less than 40 reports; still biased
3FZW	0				No reports
9MCP6	0				No reports

TABLE 5: LIST OF MARINE OBSERVING PLATFORMS REPORTING SUSPECT WIND SPEED OBSERVATIONS OVER THE PERIOD FEBRUARY TO JUNE 1998.

Column 1 Call sign or identifier.

Column 2 Number of wind speed observations available for monitoring over the 5-month period, excluding duplicates, but including any observations with gross errors.

Column 3 Number of wind observations with vector difference from background of more than 25ms^{-1} (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Columns 6-9 Number of times observing platform has appeared on suspect lists. B=Bracknell, E=ECMWF, T=Tokyo, W=Washington.

Column 10 Comments on quality of wind speed observations.

Notes:

1. Units are ms^{-1}.
2. Observing platforms marked with an asterisk were listed in the previous report (July to December 1997)

Table 5a: Platforms reporting in BUOY code

*i): Platforms **non-operational** at the end of the reporting period*

Ident.		N Obs.	NGE	SD	Bias	B	E	T	W	Comments
44624		2531	11	3.4	-5.6	2	2	2	4	Bias
62803	*	1624	2	4.2	-5.8	3	2	1	2	Bias; erratic at times

*ii): Platforms **operational** at the end of the reporting period*

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
52657	351	0	2.3	-6.6	4	0	0	4	Bias

Table 5b: Platforms reporting in SHIP code

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
DQVK	260	1	4.8	3.1	1	1	2	0	Bias +6 ms-1 from May
ELND4	88	0	3.4	5.2	2	0	0	1	Bias
ELQX8	56	6	5.0	13.7	2	2	1	2	Bias
ELRR5	116	2	4.7	4.3	1	0	0	0	Bias +6 ms-1 from April
FNTS	222	0	5.0	4.8	2	0	0	2	Bias +8 ms-1 from May
LAZK4	54	1	6.6	8.9	2	0	1	1	Bias
OYCZ	57	7	8.3	9.6	1	0	1	1	Bias; erratic
PDGS	57	0	5.2	7.0	2	1	2	2	Bias
PJOX	103	0	4.6	6.8	3	2	1	2	Bias
VRUU4	163	3	5.9	4.3	1	1	0	1	Bias from May
VRVI3 *	85	0	3.8	5.1	1	0	2	0	Bias
XYKX	53	0	2.5	6.7	1	0	1	0	Bias
3EMJ6	247	0	3.3	6.0	4	3	4	2	Bias
3ETH4	72	1	3.4	6.5	2	1	1	1	Bias
3FTR6	181	0	4.2	5.3	4	0	0	0	Bias

TABLE 6: LIST OF PLATFORMS REPORTING IN SHIP CODE NOT APPEARING IN TABLE 5 BUT LISTED AS SUSPECT OVER THE PERIOD JULY TO DECEMBER 1997.

Column 1 Call sign or identifier.

Column 2 Number of wind speed observations available for monitoring over the 5-month period, excluding duplicates, but including any observations with gross errors.

Column 3 Number of wind observations with vector difference from background of more than 25ms^{-1} (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Column 6 Comments on quality of wind speed observations.

Notes: 1. Units are ms-1.

Ident.	N Obs.	NGE	SD	Bias	Comments
DUQM	188	3	6.7	3.6	Less erratic
GQEK	10	0	7.2	4.6	Less than 40 reports; still erratic
PEXU	157	0	3.0	0.6	No longer biased
PHHQ	122	0	2.3	1.4	No longer erratic
PJNP	221	0	3.6	2.4	No longer erratic
VRUZ7	80	1	2.4	1.9	No longer biased
ZCBE7	138	0	5.1	-0.5	Not biased from March
3BIX	43	0	4.1	4.1	Not biased from April
3ELC6	170	0	2.3	1.4	No longer biased
3EMW5	34	1	5.8	7.0	Not biased from June
3FHE4	0				No reports
8PNH	197	0	2.5	1.1	No longer biased

TABLE 7: LIST OF MARINE OBSERVING PLATFORMS PRODUCING SUSPECT WIND DIRECTION OBSERVATIONS OVER THE PERIOD FEBRUARY TO JUNE 1998.

Column 1 Call sign or identifier.

Column 2 Number of wind direction observations available for monitoring over the 5-month period,excluding duplicates, but including any observations with gross errors.

Column 3 Number of wind observations with vector difference from background of more than 25ms^{-1} (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Columns 6-9 Number of times observing platform has appeared on suspect lists. B=Bracknell, E=ECMWF, T=Tokyo, W=Washington.

Column 10 Comments on quality of wind direction observations.

Notes:

1. Units are degrees (°).
2. Observing platforms marked § had a significant bias at some time within the period and the statistics and their plots refer to direction reports associated with background wind speeds greater than 5 ms^{-1}. If no significant speed bias was present the statistics and plots refer to direction reports with an observed speed greater than 5 ms^{-1}.
3. Observing platforms marked with an asterisk were listed in the previous report (July to December 1997)

Table 7a: Platforms reporting in BUOY code

*i): Platforms **non-operational** at the end of the reporting period*

There are no platforms in this category.

*ii): Platforms **operational** at the end of the reporting period*

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
21531	759	0	68.8	-29.0	1	3	2	2	Erratic
46632	1791	0	28.0	-30.5	2	4	0	2	Bias
51015	352	0	16.8	-32.9	1	4	3	2	Bias
52657 §	169	0	117.1	15.8	5	0	0	5	Erratic

Table 7b: Platforms reporting in SHIP code

Ident.	N Obs.	NGE	SD	Bias	B	E	T	W	Comments
C6OT6	84	0	67.7	61.1	1	1	1	1	Bias and erratic
3FRU7	231	0	66.6	-2.6	0	1	1		Erratic
45135	932	0	42.2	46.0	2	0	1	1	Bias from May
62120	96	0	104.0	-2.8	2	0	0	2	Erratic
62162	172	0	112.4	8.2	3	0	0	2	Erratic
63104	1166	0	102.8	16.1	4	2	2	3	Erratic
63112	225	0	89.9	-25.6	3	1	0	4	Erratic

TABLE 8: LIST OF PLATFORMS REPORTING IN SHIP CODE NOT APPEARING IN TABLE 7 BUT LISTED AS SUSPECT OVER THE PERIOD JULY TO DECEMBER 1997.

Column 1 Call sign or identifier.

Column 2 Number of wind direction observations available for monitoring over the 5-month period,excluding duplicates, but including any observations with gross errors.

Column 3 Number of wind observations with vector difference from background of more than 25ms^{-1} (gross error).

Column 4 Standard deviation of observation-minus-background differences excluding cases of gross error.

Column 5 Mean of observation-minus-background differences (bias) excluding cases of gross error.

Column 6 Comments on quality of wind direction observations.

Notes: 1. Units are degrees (°).

Ident.	N Obs.	NGE	SD	Bias	Comments
ZCBE7	122	0	31.5	-1.6	Less erratic
3EMW5	31	1	50.8	9.1	Less than 40 reports; still erratic
3FSL4	172	2	45.8	-11.4	Less erratic

TABLE 9: LIST OF MARINE OBSERVING PLATFORMS REPORTING SUSPECT SEA–SURFACE TEMPERATURE OBSERVATIONS OVER THE PERIOD JANUARY TO APRIL 1998.

Column 1 Call sign or identifier

Column 2 Number of sea-surface temperature observations available for monitoring over the 4-month period, including any observations with gross errors.

Column 3 Number of sea surface temperature observations differing by more than 5°C from the analysis (gross errors).

Column 4 Standard deviation of observation-minus-analysis differences excluding cases of gross error.

Column 5 Mean of observation-minus-analysis differences excluding cases of gross error.

Column 6 Comments on quality of sea surface temperature observations.

Notes:

1. Units are °C.
2. Observing platforms marked with an asterisk were listed in the previous report (July to December 1997)

Table 9a: Platforms reporting in BUOY code

*i): Platforms **non-operational** at the end of the reporting period*

Ident.	N Obs.	NGE	SD	Bias	Comments
21535 *	79	6	1.5	-2.9	Bias
21573	118	67	2.0	-2.3	Gross errors and bias
21610	133	0	0.0	2.8	Bias
23913	50	46	2.7	-3.0	Gross errors
33900	324	324	****	****	Gross errors - bias of +15
33903	630	175	0.2	0.5	Gross errors - bias of +11 in March
51595	106	58	1.6	-2.5	Gross errors
51632	353	348	0.0	-4.9	Gross errors - bias of -6
51634	454	10	0.3	-4.1	Bias
51636	418	34	0.4	-3.7	Bias
61514	380	7	0.7	3.8	Bias
61556	522	518	0.0	-4.9	Gross errors - bias of -7
61579	116	32	1.4	-3.2	Bias and erratic

*ii): Platforms **operational** at the end of the reporting period*

Ident.		N Obs.	NGE	SD	Bias	Comments
15535		258	3	0.3	-3.2	Bias
15536		318	0	0.4	-3.3	Bias
15537	*	292	65	0.2	4.7	Bias
15538	*	290	288	0.0	4.9	Gross errors and bias
17534		335	5	0.6	3.2	Bias
21602		227	67	0.4	4.3	Bias
21603		223	8	0.6	3.6	Bias
21903		42	28	1.5	3.7	Bias
23948		298	291	3.6	-0.1	Gross errors - bias of -10 from March
33503		356	0	0.5	2.7	Bias
33577		331	11	0.8	2.5	Bias
44502		336	75	2.0	-2.6	Bias
44601		53	0	0.4	2.8	Bias
46585		105	27	1.5	-0.8	Gross errors
51633		599	7	0.9	-2.4	Bias
53516		84	15	1.4	-3.1	Bias and erratic
61516		489	11	0.7	3.9	Bias
61517	*	520	16	0.8	3.3	Bias
61613		78	21	2.7	0.3	Gross errors and erratic

Table 9b: Platforms reporting in SHIP code

Ident.	N Obs.	NGE	SD	Bias	Comments
C6FA7 *	116	1	0.7	3.3	Bias
C6JN	83	2	0.8	3.0	Bias
C6LC4	118	0	1.0	2.6	Bias
C6MS4 *	76	5	1.0	-2.8	Bias
DGOS	121	52	1.5	2.6	Gross errors; bias
DZDI *	46	24	0.9	-4.1	Gross errors; bias
ELBG9 *	67	0	0.6	-3.0	Bias
ELGD4	50	22	0.5	3.9	Gross errors; bias
ELPN9	338	18	1.2	-2.7	Bias
ELQX8	65	8	2.8	-1.8	Standard deviation
ELRT3 *	45	2	0.5	-3.5	Bias
JADY *	91	0	0.8	3.5	Bias
JBGY	105	6	1.4	3.1	Bias
J8JW7	54	1	1.3	-2.9	Bias
J8KU6	87	26	1.9	0.6	Gross errors
KBGK *	69	3	0.4	-3.8	Bias
KGTH	47	32	1.1	-0.1	Gross errors
KNFG *	66	4	0.9	-3.5	Bias
KNLO *	69	38	0.8	-3.8	Gross errors; bias
LAXQ2	75	12	1.4	2.7	Bias
NFMK *	74	11	1.2	3.6	Bias
PDYI	148	4	1.1	-2.8	Bias
SDIA	167	10	0.7	4.3	Bias
SFRZ *	175	20	1.6	2.6	Bias
S6ES *	162	14	1.1	3.2	Bias
UAMX	84	2	0.7	-3.9	Bias
UCNT	108	28	1.7	-2.5	Gross errors; bias
UDYG	124	13	1.6	-2.5	Bias from March
UDYN	137	5	0.8	-3.7	Bias
UFYN *	192	74	0.6	-1.9	Gross errors; bias from March
UHRT	75	7	1.7	-2.7	Bias
UICO	111	4	1.2	3.3	Bias
VCRJ *	40	0	1.1	2.6	Bias
VGDT	56	1	0.5	2.5	Bias
VMMR	261	125	1.4	0.2	Gross errors
VROP *	115	29	2.3	-1.9	Gross errors
VRUO7 *	127	5	0.9	3.5	Bias
VVFM	53	19	2.7	-2.0	Gross errors
WAUU	53	11	1.1	4.1	Bias
WPPO	53	22	1.8	1.7	Gross errors

Continued →

Ident.		N Obs.	NGE	SD	Bias	Comments
WRYC	*	92	4	0.8	-2.4	Bias
WTED		148	48	2.5	-0.6	Gross errors
WZJD		99	3	0.7	-3.0	Bias
YJQA8		151	72	2.0	2.2	Gross errors
YJYN8		44	4	1.9	2.7	Bias
YJZC5	*	110	238	1.4	-3.4	Bias
ZCBE7		100	74	1.3	2.7	Gross errors
ZCBF3		84	21	1.9	-2.2	Gross errors
3EBW4	*	54	24	0.5	1.3	Gross errors
3ECM7	*	244	19	1.3	3.0	Bias
3FLU7		96	65	2.0	-2.7	Gross errors
44014		266	29	0.6	-3.8	Bias
63111	*	384	176	1.7	-1.1	Gross errors
9KKF		181	42	2.3	1.0	Gross errors
9KKS	*	137	48	1.5	-3.0	Gross errors; bias
9MBB7		49	8	2.7	0.7	Standard deviation
9VHJ	*	45	42	2.0	-2.8	Gross errors; bias

TABLE 10: LIST OF PLATFORMS REPORTING IN SHIP CODE NOT APPEARING IN TABLE 9 BUT LISTED AS SUSPECT OVER THE PERIOD JULY TO DECEMBER 1997.

Column 1 Call sign or identifier

Column 2 Number of sea-surface temperature observations available for monitoring over the 4-month period, including any observations with gross errors.

Column 3 Number of sea surface temperature observations differing by more than 5°C from the analysis (gross errors).

Column 4 Standard deviation of observation-minus-analysis differences excluding cases of gross error.

Column 5 Mean of observation-minus-analysis differences excluding cases of gross error.

Column 6 Comments on quality of sea surface temperature observations.

Notes: 1. Units are °C.

Ident.	N Obs.	NGE	SD	Bias	Comments
CTFE	7	2	0.3	-4.5	Few reports; still biased
C6BT8	13	2	2.3	0.1	Less than 40 reports; less erratic
C6IM2	33	0	1.5	-0.4	Less than 40 reports; bias removed
C6KJ5	165	4	1.3	1.7	Bias reduced
C6T2064	0				No reports
C6YY	104	4	1.2	-2.3	Bias reduced
DS6ESD	0				No reports
DURY	36	2	1.1	2.7	Less than 40 reports; last report in January
ELDU4	0				No reports
ELKU8	0				No reports
ELMV6	7	0	0.2	0.9	Few reports; no bias
ELOW4	103	36	0.9	1.4	Few gross errors after January
ELRH7	31	11	0.6	4.1	Less than 40 reports; bias persists
ELRT	3	0	1.3	-2.1	Few reports
KGJB	182	17	1.6	-2.2	Fewer gross errors from March
KIOH	35	1	1.3	-2.1	Less than 40 reports; bias reduced
KLKZ	34	1	0.9	0.9	Less than 40 reports; bias reduced
KRGJ	64	4	1.5	-2.0	Bias reduced
KSPH	120	13	1.7	-2.2	Bias reduced
LADR4	8	2	1.7	2.5	Few reports
LAHG2	108	13	1.8	1.2	Bias reduced
LASS2	6	0	1.4	1.7	Few reports
LAVV4	129	12	1.9	-1.4	Fewer gross errors
LF4C	368	56	0.3	-0.1	Fewer gross errors
P3NF5	13	3	1.2	-1.5	Few reports

Continued →

Ident.	N Obs.	NGE	SD	Bias	Comments
UCJD	98	5	1.2	1.9	Bias reduced
UCMV	14	6	1.6	-0.9	Few reports
UCNA	124	30	2.2	-1.6	Bias reduced
UCOJ	66	24	1.6	-1.1	Gross errors stopped in February
UCPQ	245	35	1.6	-2.0	Bias reduced
UIRN	110	2	1.2	0.7	Bias reduced
UMTC	8	0	0.8	1.2	Few reports
VJIK	4	2	2.1	0.1	Few reports
VJRB	44	11	0.6	-1.7	Bias reduced
VOLG	661	5	1.1	-0.7	Fewer gross errors
VRUY4	181	0	1.2	-0.1	No bias
WA4659	9	0	1.1	-1.7	Few reports
WCJY	0				No reports
WC5932	7	0	0.6	-3.7	Few reports
WRFJ	0				No reports
WRGY	18	2	0.7	-1.4	Few reports
WSRL	17	0	0.8	-3.0	Few reports; bias persists
XYKW	26	20	0.5	-3.5	Less than 40 reports; gross errors persist
YJYY2	110	11	1.7	-2.4	Bias reduced
ZCAV6	194	2	0.6	-2.0	Bias reduced
3ELY7	353	12	1.1	0.4	Fewer gross errors
3EPB6	51	2	1.4	2.2	Bias reduced
3ESF7	0				No reports
3EWK8	41	3	1.2	1.5	Bias reduced
3FMA4	42	15	1.6	-2.2	Bias reduced
44137	25	9	1.6	1.8	Less than 40 reports; gross errors persist
45144	0				No reports
46030	0				No reports
62128	29	29	****	****	Less than 40 reports; bias persists
62304	2842	1	0.4	0.3	No bias
9MBE4	14	0	0.7	0.5	Few reports
9VOQ	31	5	1.8	2.1	Less than 40 reports; bias smaller

Figure 1: Number of observations of pressure received at Bracknell on the GTS for each of the six-month periods covered by the WMO reports on the quality of marine observations

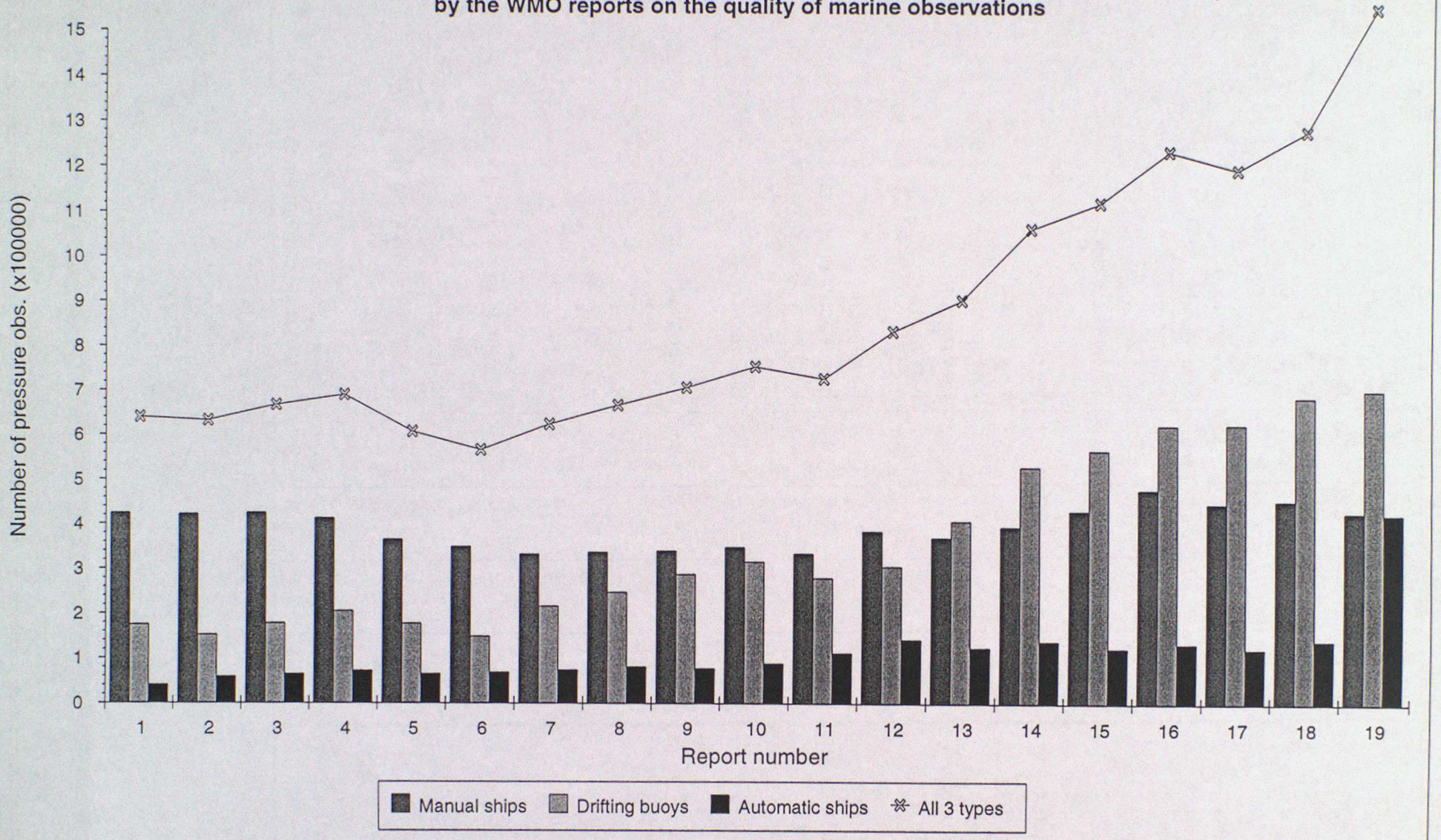
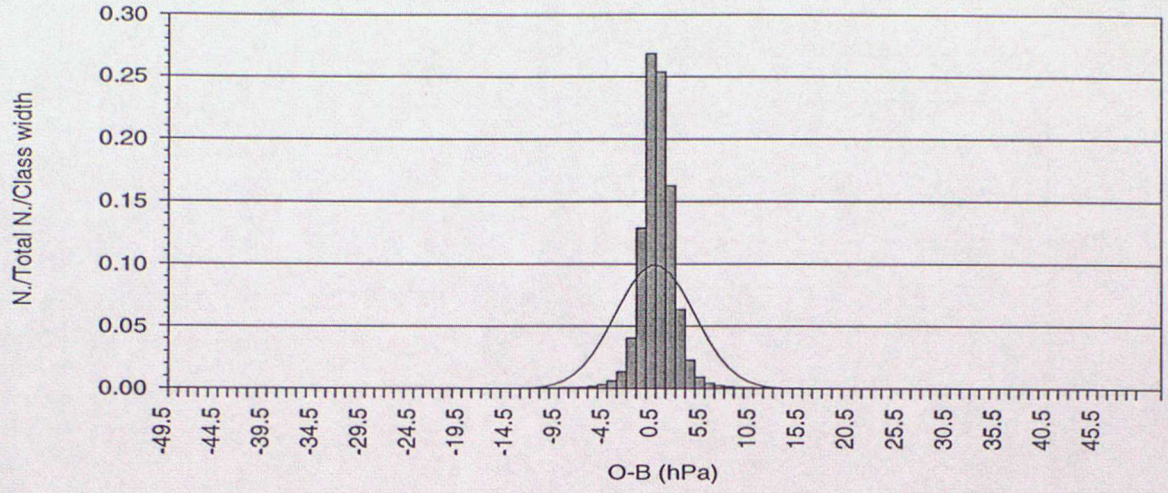
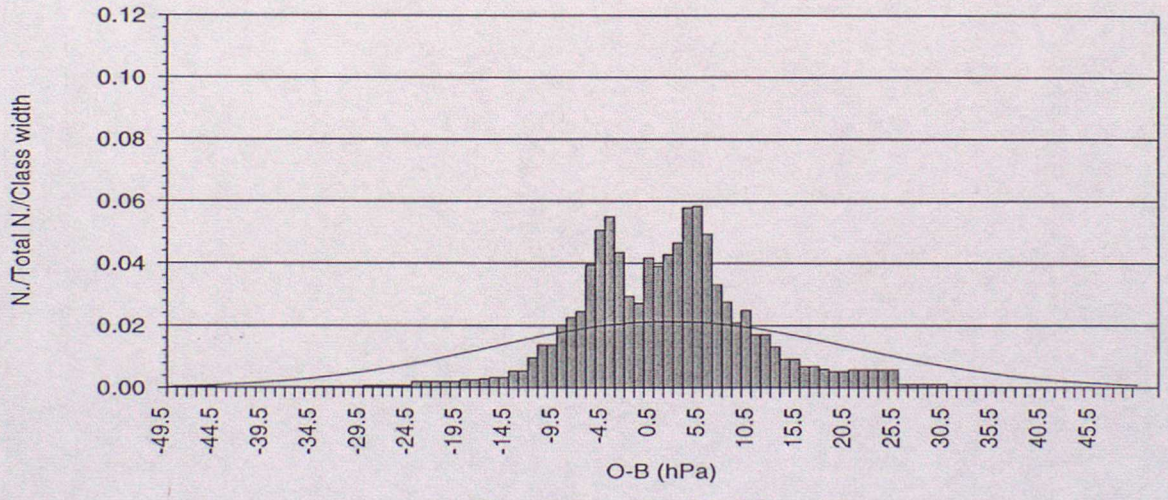


Figure 2a: Distribution of ship O-B pressure (hPa)
Period of data: Feb-Jun 1998 Data used: All observations



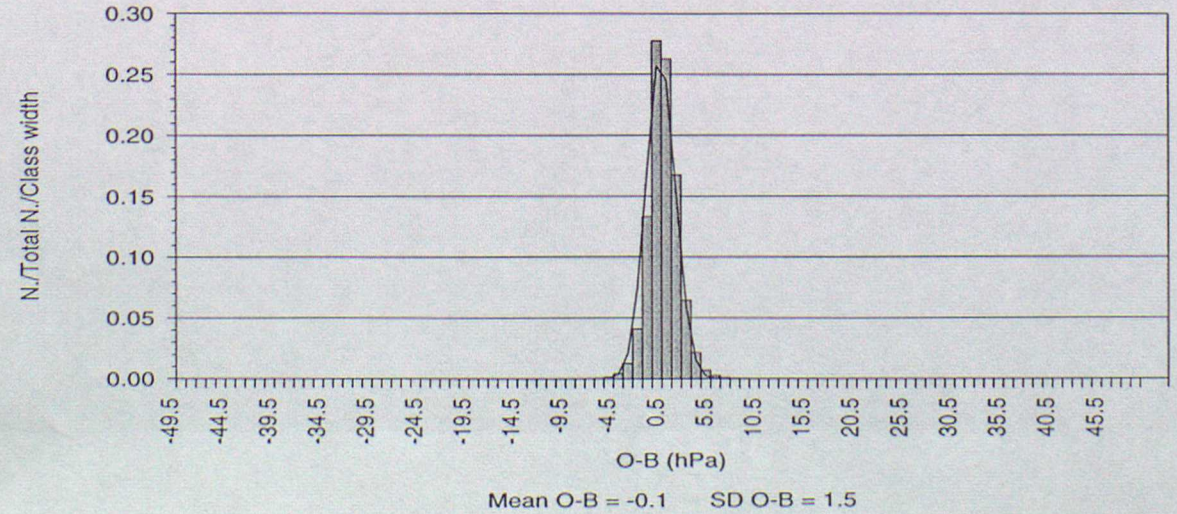
Mean O-B = -0.1 SD O-B = 4.0

Figure 2b: Distribution of ship O-B pressure (hPa)
Period of data: Feb-Jun 1998 Data used: Flagged observations



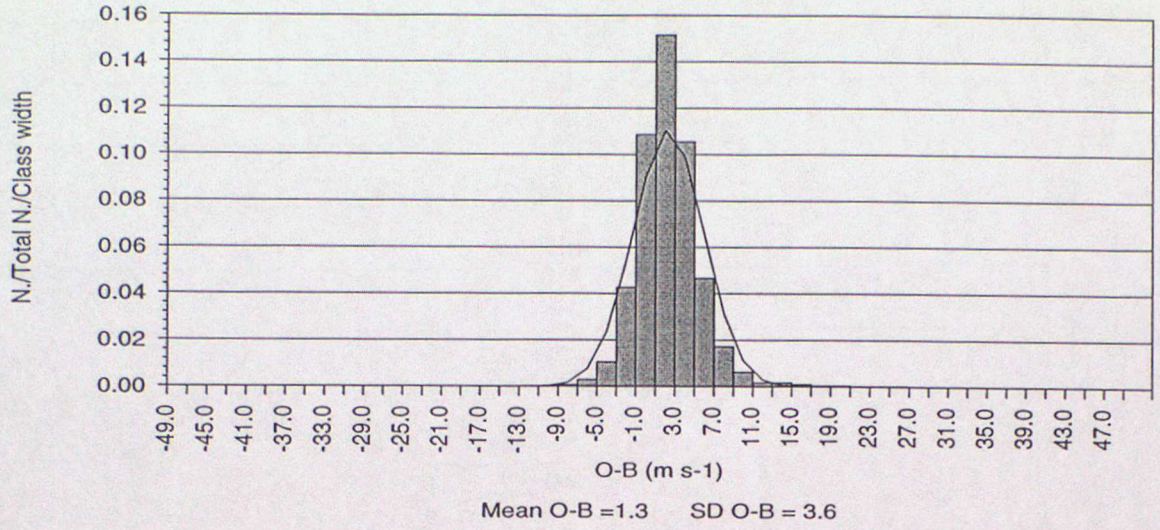
Mean O-B = 1.7 SD O-B = 18.7

Figure 2c: Distribution of ship O-B pressure (hPa)
Period of data: Feb-Jun 1998 Data used: Unflagged observations



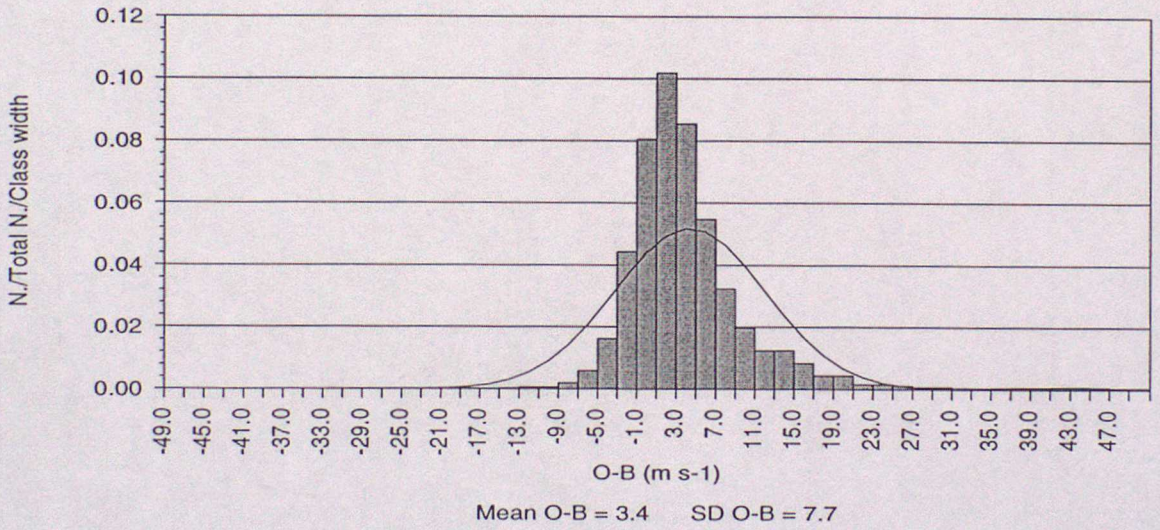
Mean O-B = -0.1 SD O-B = 1.5

Figure 2d: Distribution of ship O-B wind speed (m s-1)
Period of data: Feb-Jun 1998 Data used: All observations



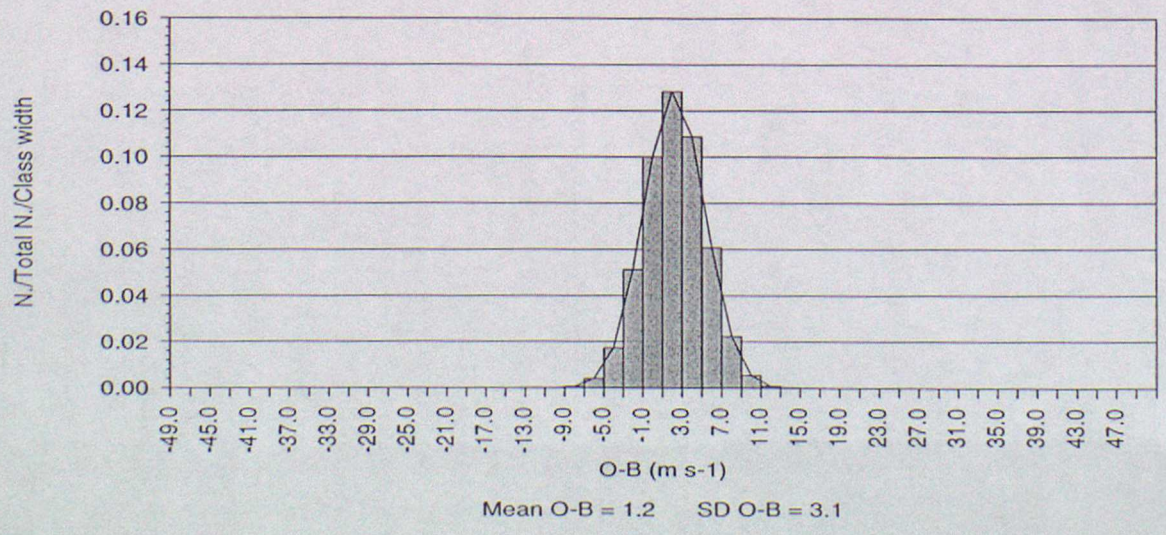
Mean O-B =1.3 SD O-B = 3.6

Figure 2e: Distribution of ship O-B wind speed (m s-1)
Period of data: Feb-Jun 1998 Data used: Flagged observations



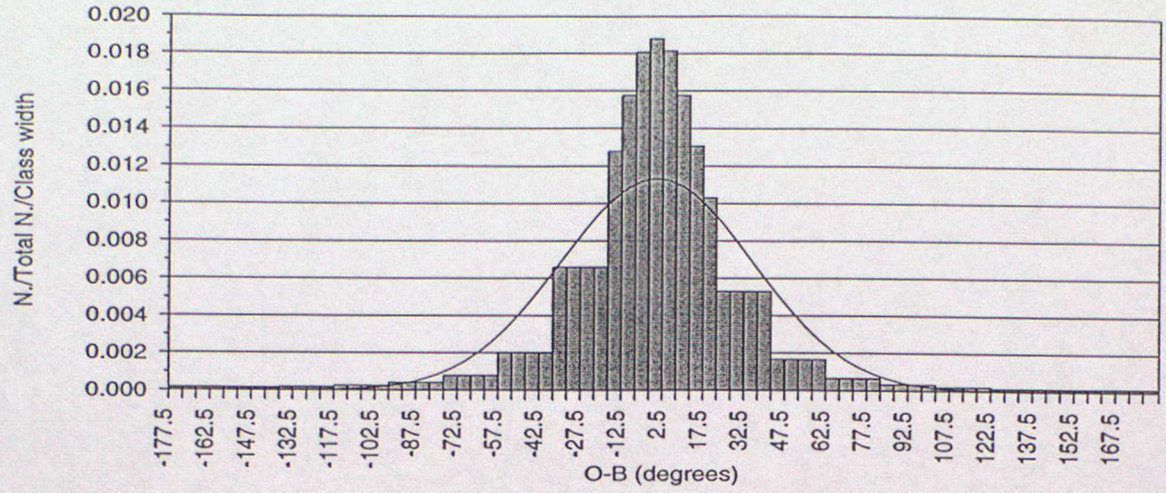
Mean O-B = 3.4 SD O-B = 7.7

Figure 2f: Distribution of ship O-B wind speed (m s-1)
Period of data: Feb-Jun 1998 Data used: Unflagged observations



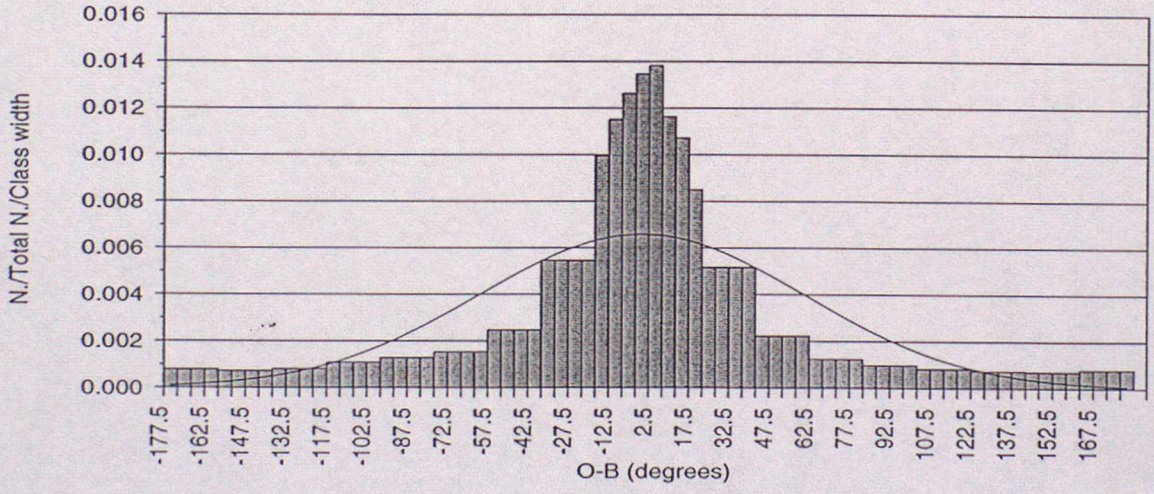
Mean O-B = 1.2 SD O-B = 3.1

Figure 2g: Distribution of ship O-B wind direction (degrees)
Period of data: Feb-Jun 1998 Data used: All observations



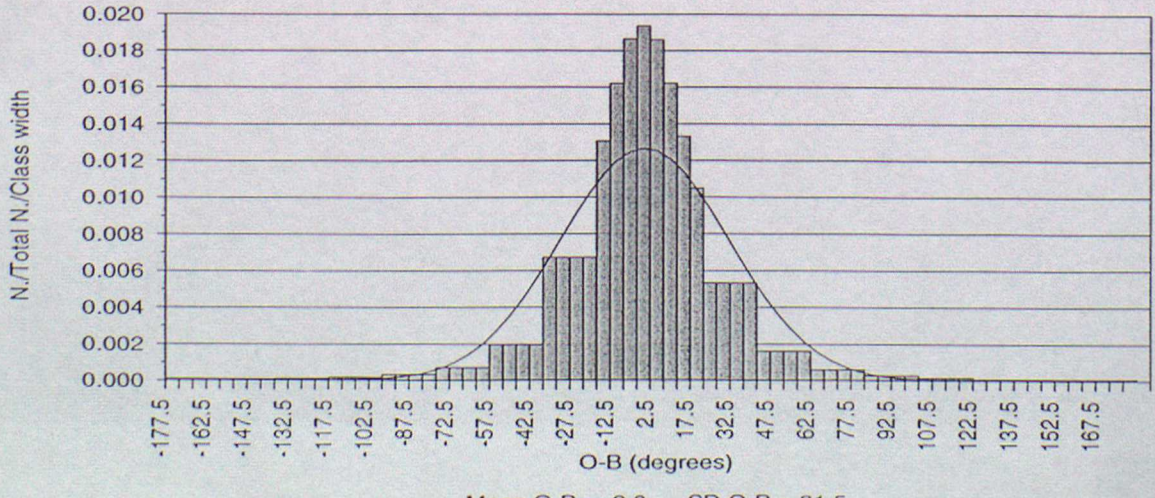
Mean O-B = -2.0 SD O-B = 35.2

Figure 2h: Distribution of ship O-B wind direction (degrees)
Period of data: Feb-Jun 1998 Data used: Flagged observations



Mean O-B = -2.4 SD O-B = 60.5

Figure 2j: Distribution of ship O-B wind direction (degrees)
Period of data: Feb-Jun 1998 Data used: Unflagged observations



Mean O-B = -2.0 SD O-B = 31.5

FIG 3: BIAS OF SHIP PRESSURE O–B. DATE:– FEBRUARY – JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE BIAS OF MAGNITUDE GREATER THAN 0.5 HPA

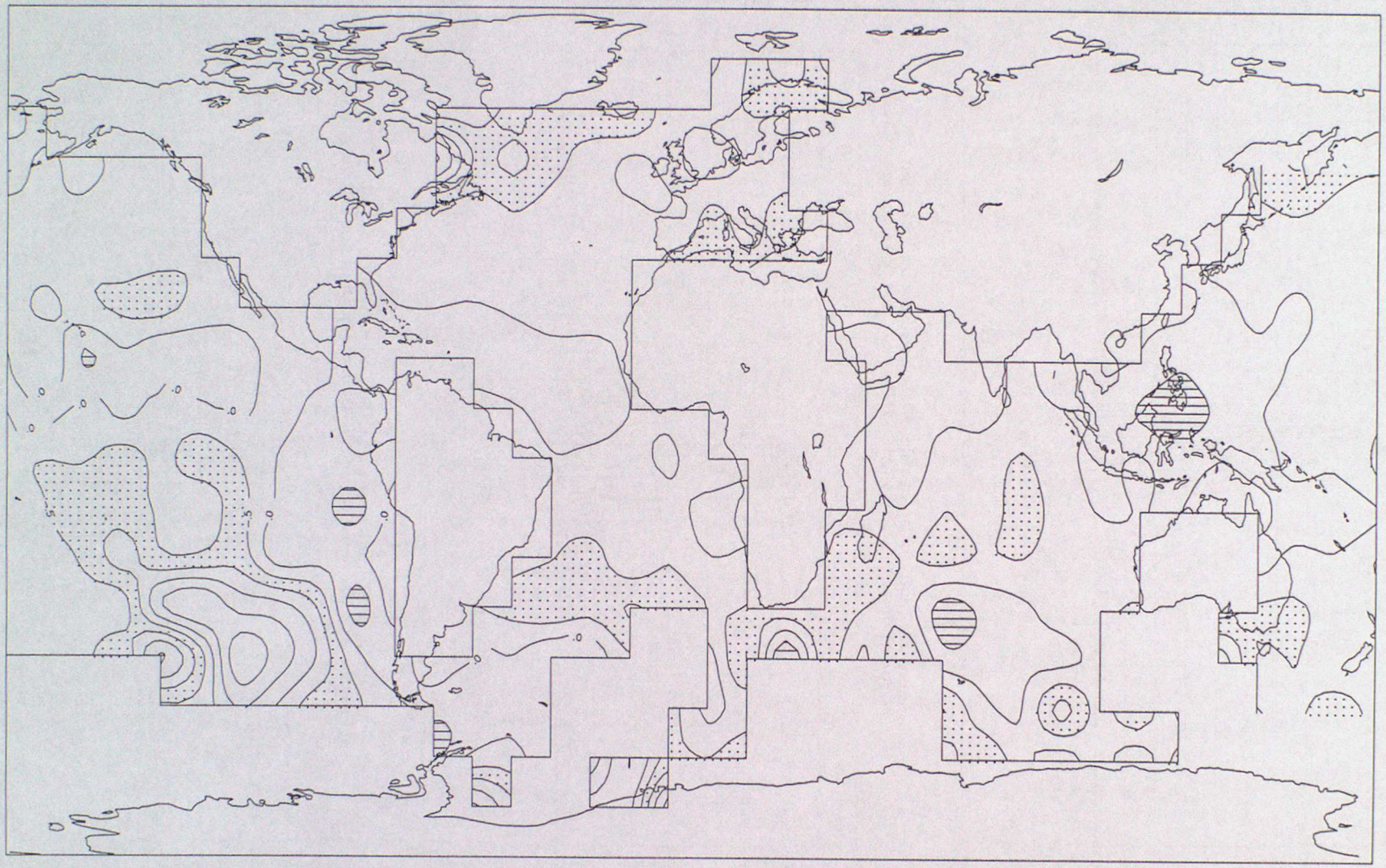


FIG 4: S.D. OF SHIP PRESSURE O–B. DATE:– FEBRUARY – JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE STANDARD DEVIATION GREATER THAN 2.0HPA

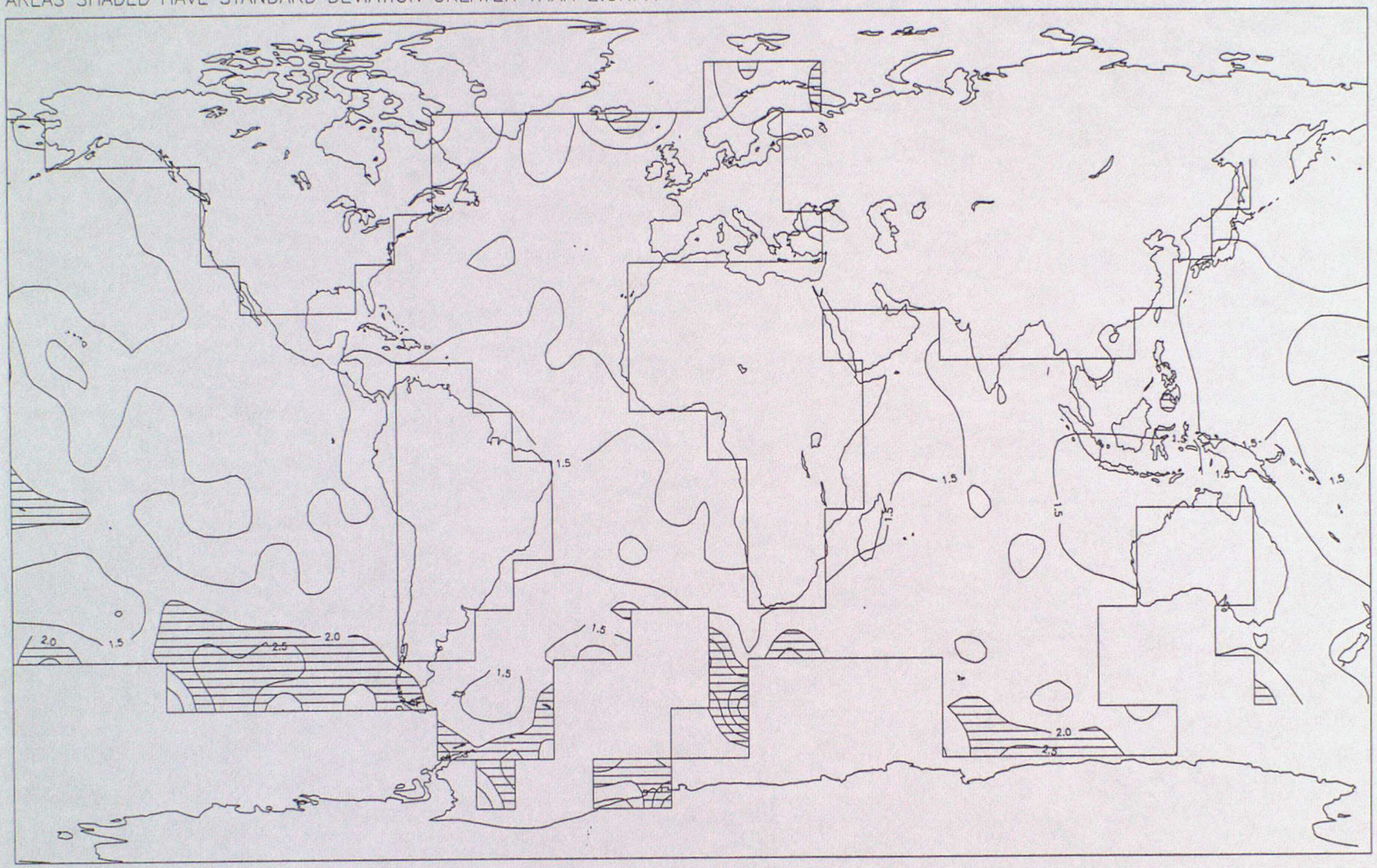


FIG 5:
PLOT OF NUMBER OF SHIP PRESSURE OBS. DATE:- FEBRUARY – JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL INCLUDED

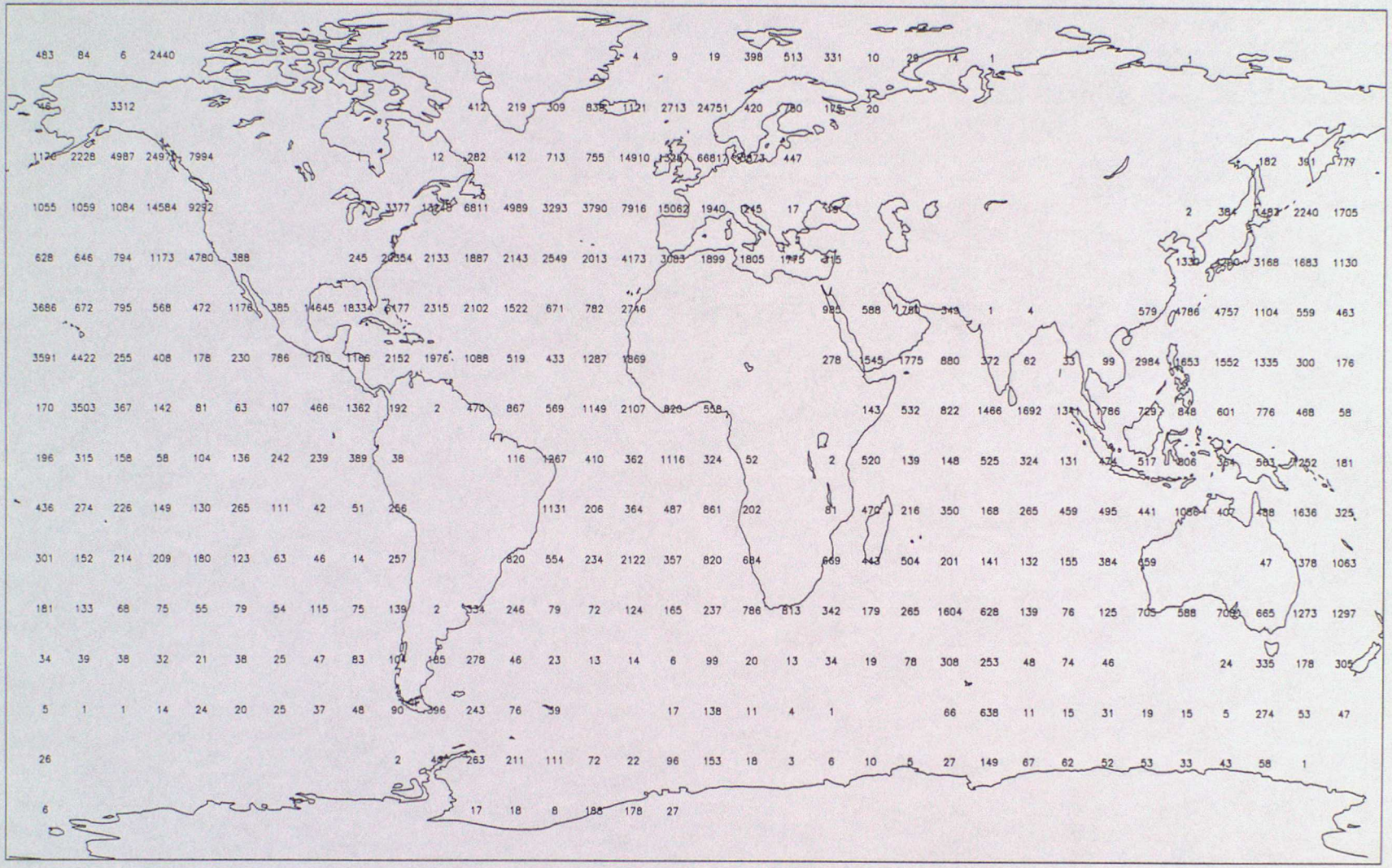


FIG 6: BIAS OF SHIP O-B WIND SPEED IN MS-1. DATE:- FEBRUARY - JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE BIAS OF MAGNITUDE GREATER THAN 2.0MS-1

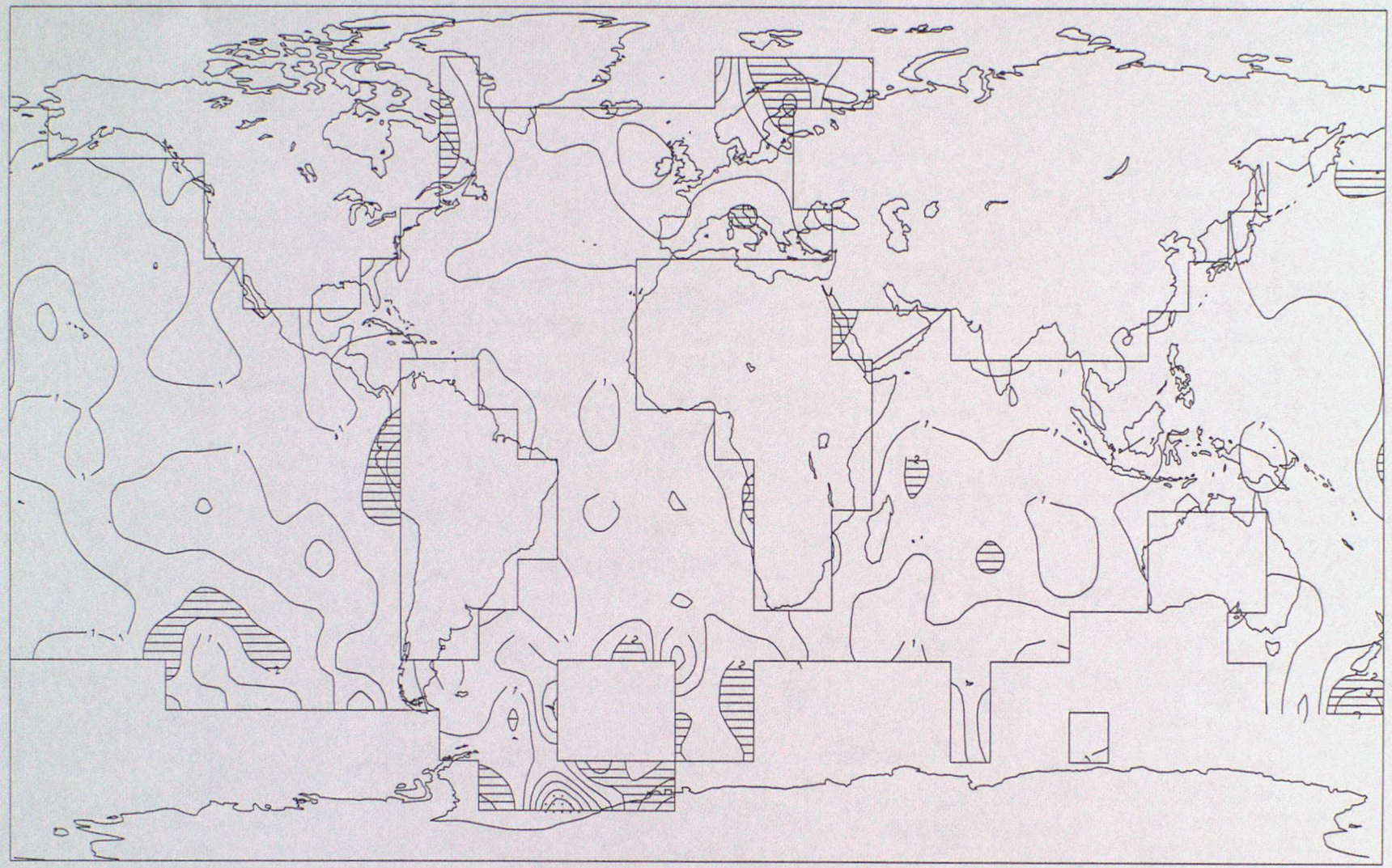


FIG 7: S.D. OF SHIP O−B WIND SPEED IN MS−1. DATE:− FEBRUARY − JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE STANDARD DEVIATION GREATER THAN 4.0 MS−1

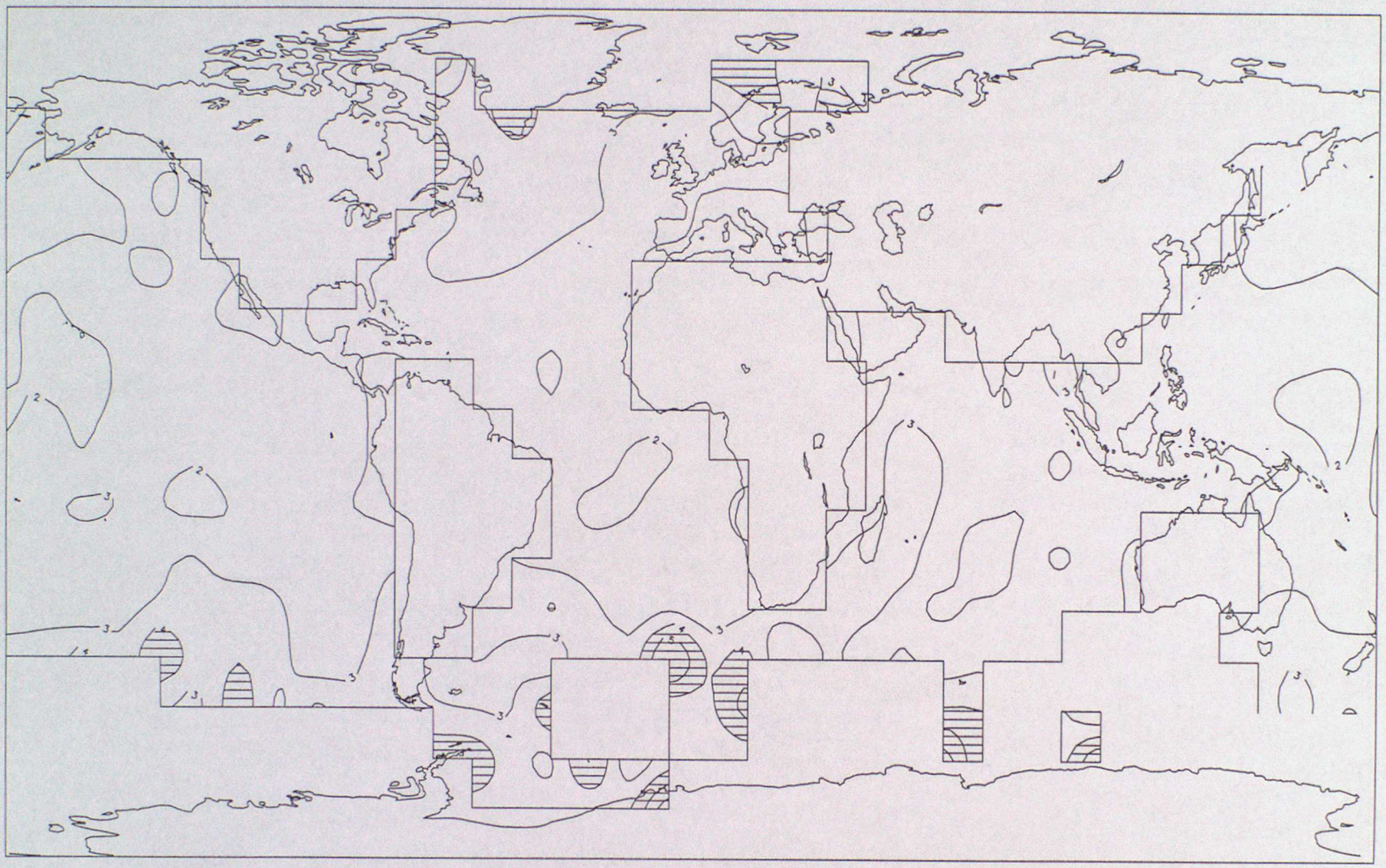


FIG 8:
PLOT OF NUMBER OF SHIP WIND SPEED OBS. DATE:- FEBRUARY - JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL INCLUDED

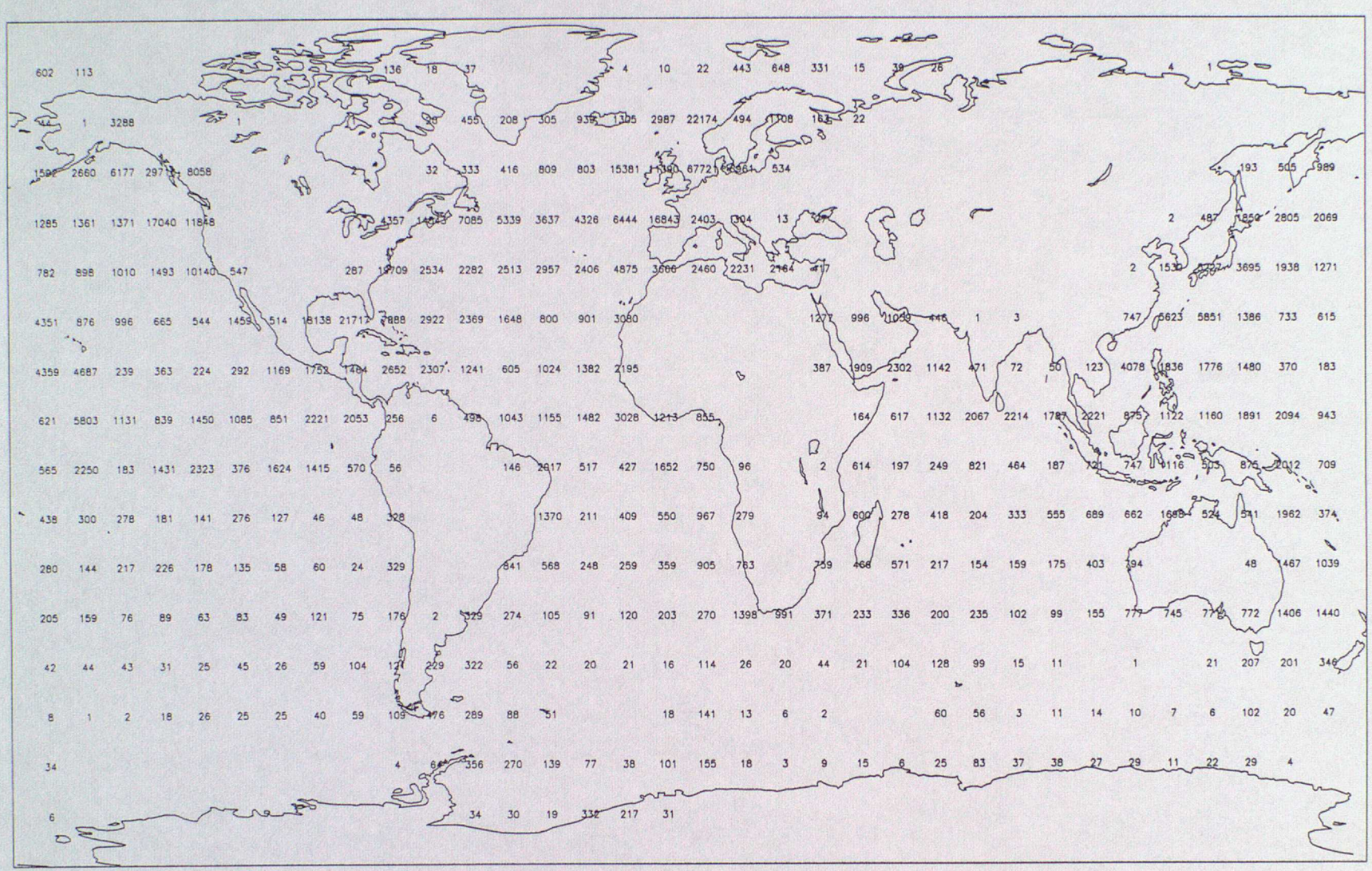


FIG 9: BIAS OF SHIP O-B WIND DIRECTION IN DEG. DATE:- FEBRUARY - JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE BIAS OF MAGNITUDE GREATER THAN 10 DEG

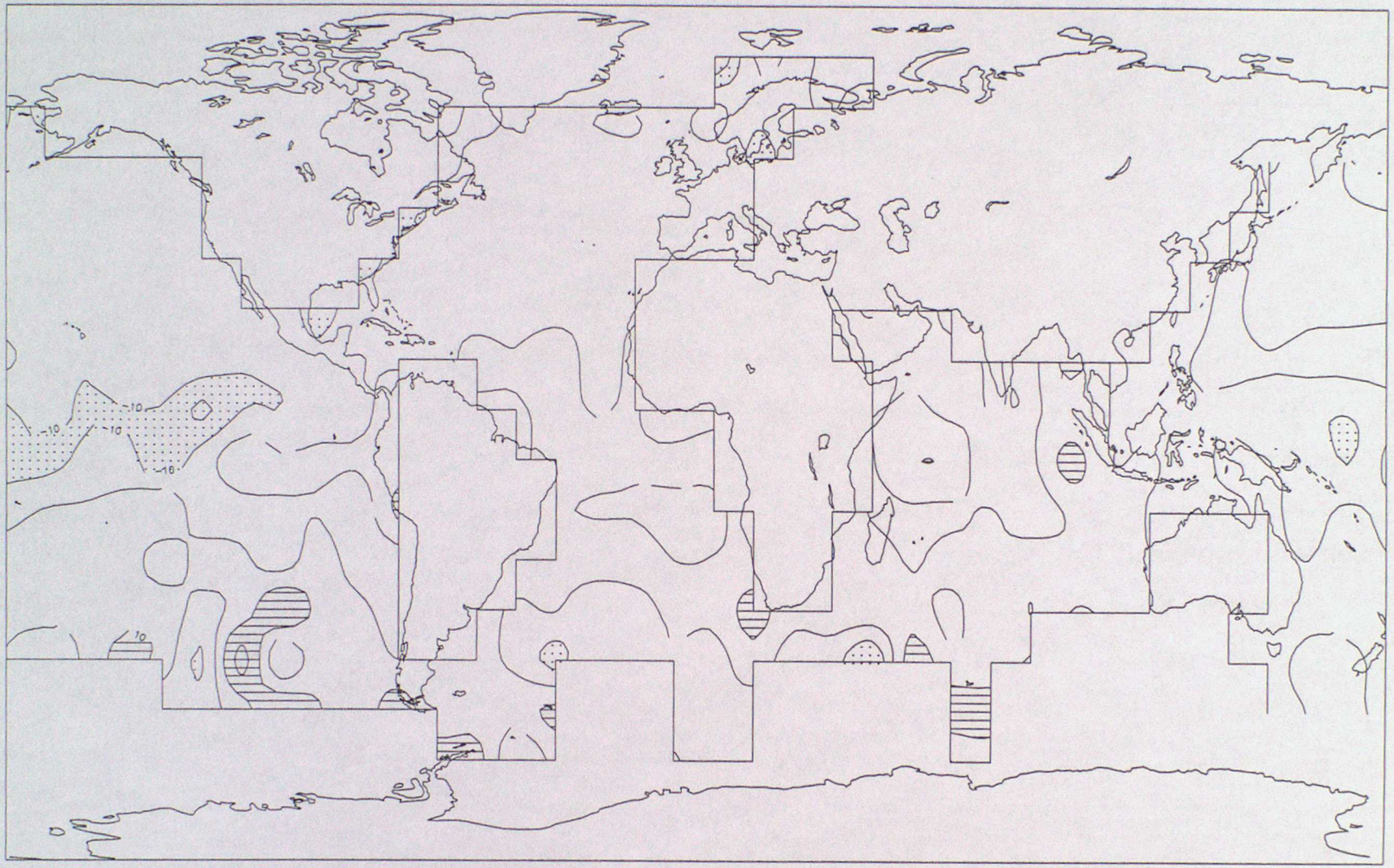


FIG 10: S.D. OF SHIP O-B WIND DIRECTION IN DEG. DATE:- FEBRUARY - JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS DRAWN TO 10 DEGREE BOXES IF N. OF OBS > 10
AREAS SHADED HAVE STANDARD DEVIATION GREATER THAN 40 DEG

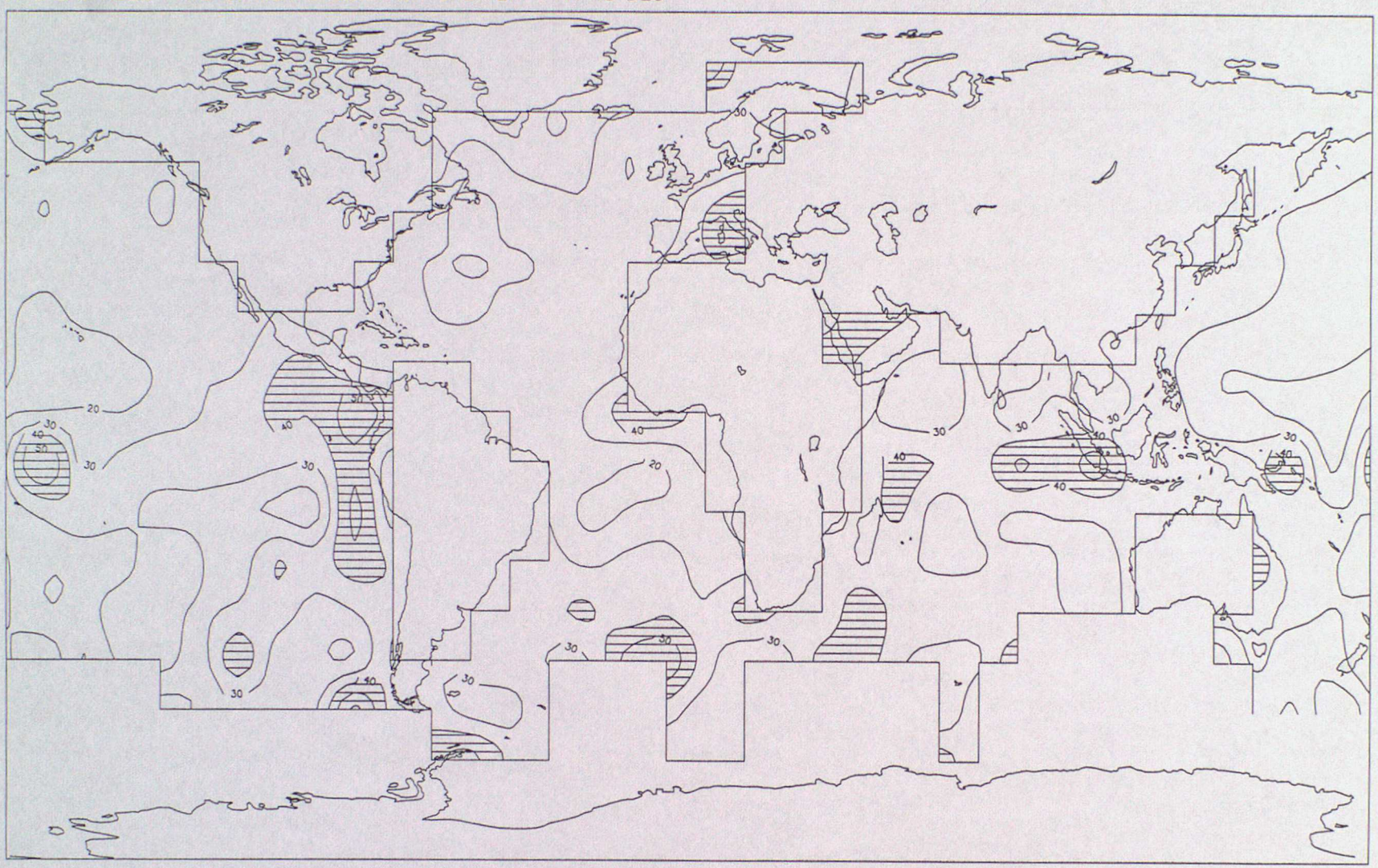


FIG 11:
PLOT OF NUMBER OF SHIP WIND DIRECTION OBS. DATE:- FEBRUARY – JUNE 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL INCLUDED

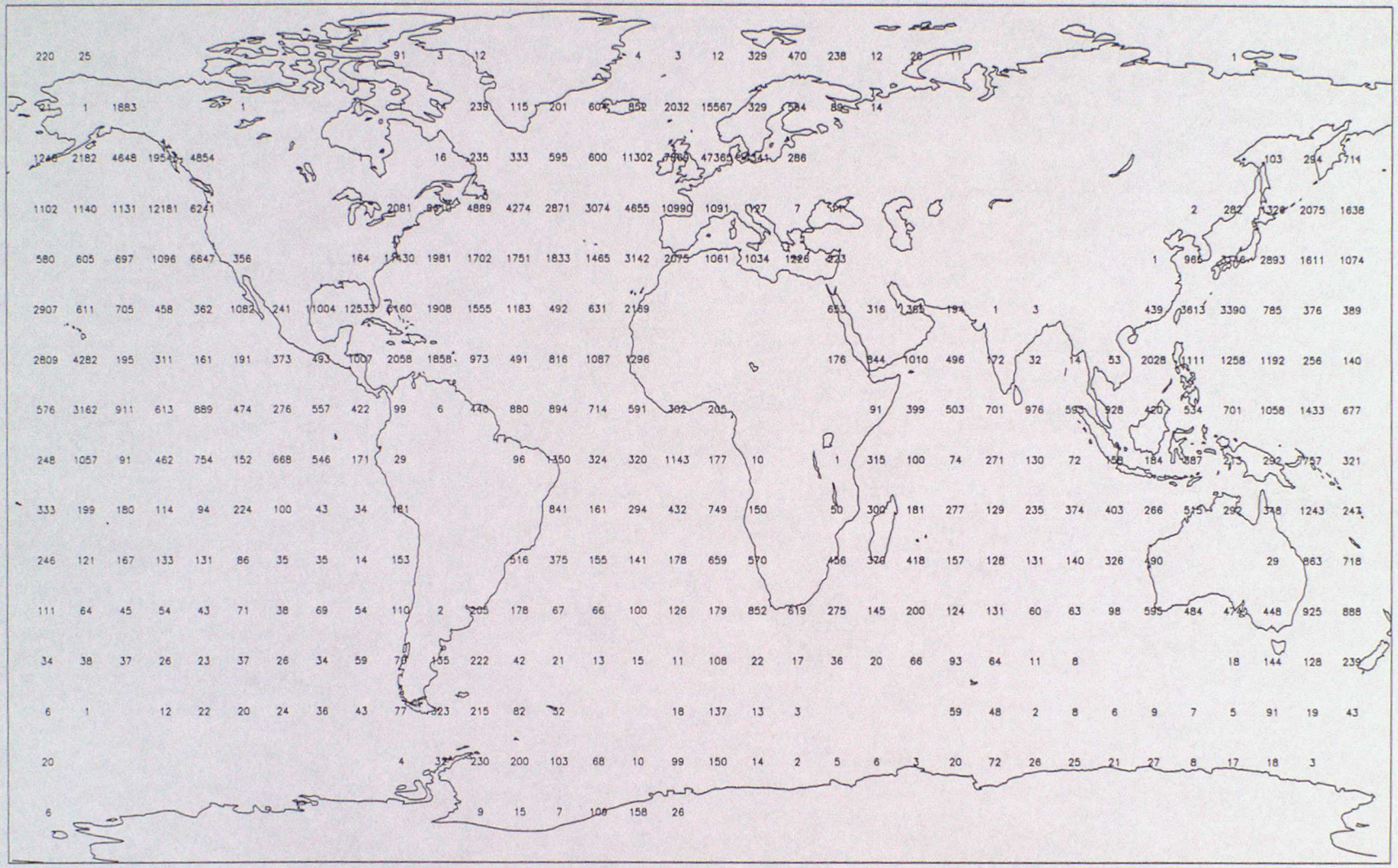


Figure12:

Sea surface temperature statistics for each observation type, for northern and southern hemisheres, January to April 1998

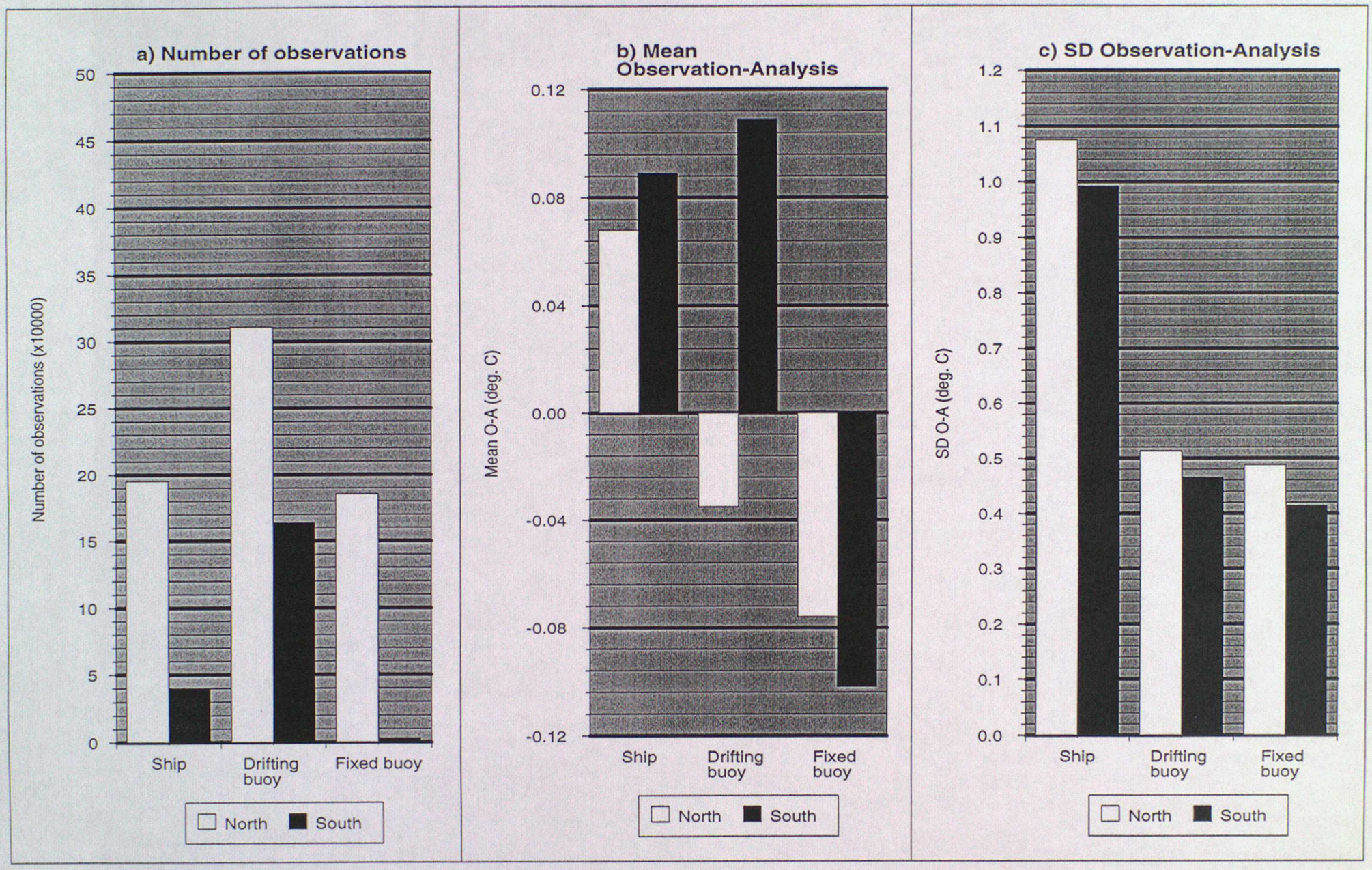


FIG 13: BIAS OF SHIP SEA SURFACE TEMPERATURES (O–A) IN DEG C
DATE:– JANUARY – APRIL 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS PLOTTED AT INTERVALS OF 0.2 DEG C

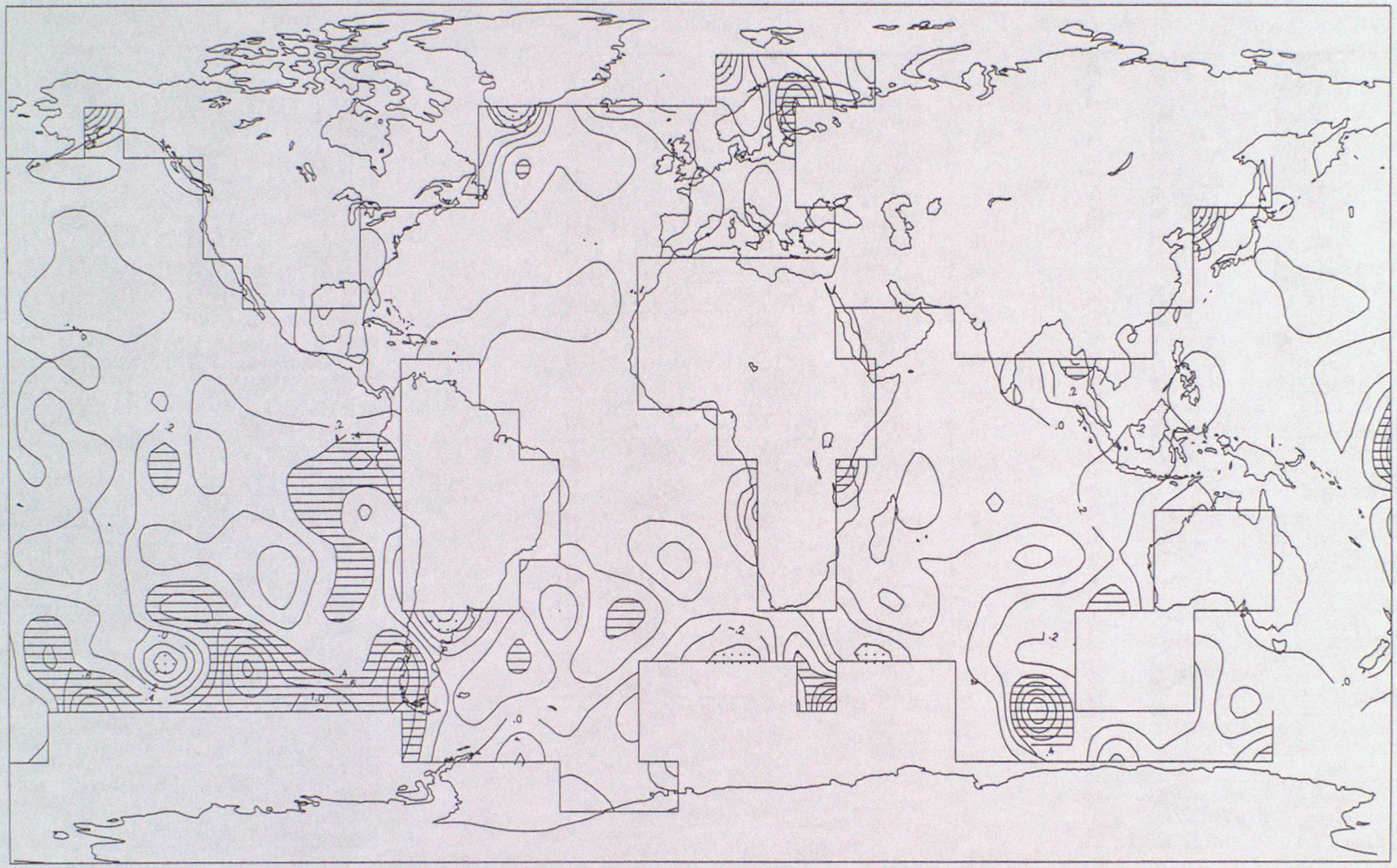


FIG 14: S.D. OF SHIP SEA SURFACE TEMPERATURES (O–A) IN DEG C
DATE:– JANUARY – APRIL 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL USED IN STATISTICS
CONTOURS PLOTTED AT INTERVALS OF 0.2 DEG C

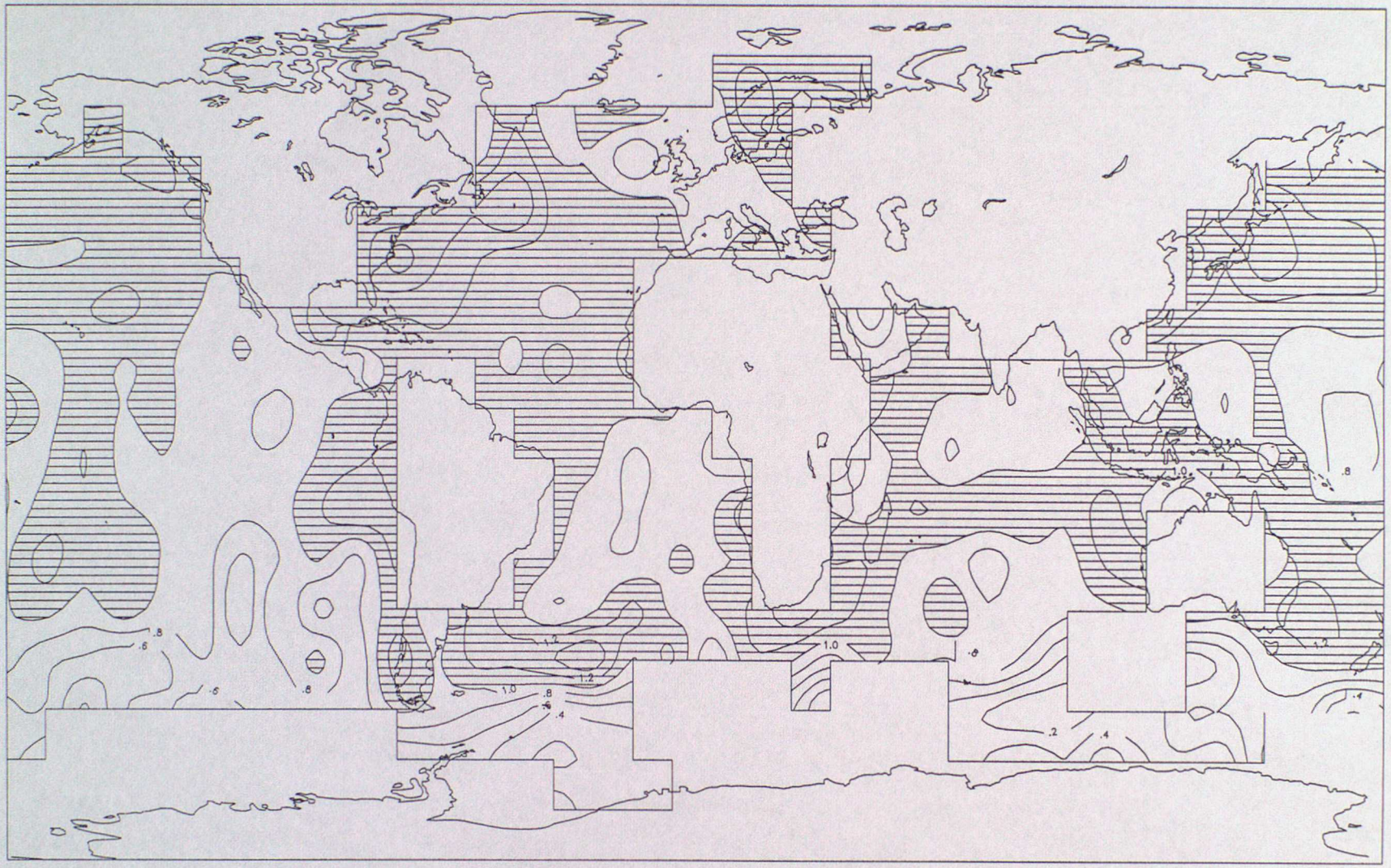


FIG 15:
NUMBER OF SHIP SEA–SURFACE TEMPERATURE OBSERVATIONS
DATE:– JANUARY – APRIL 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL ARE INCLUDED

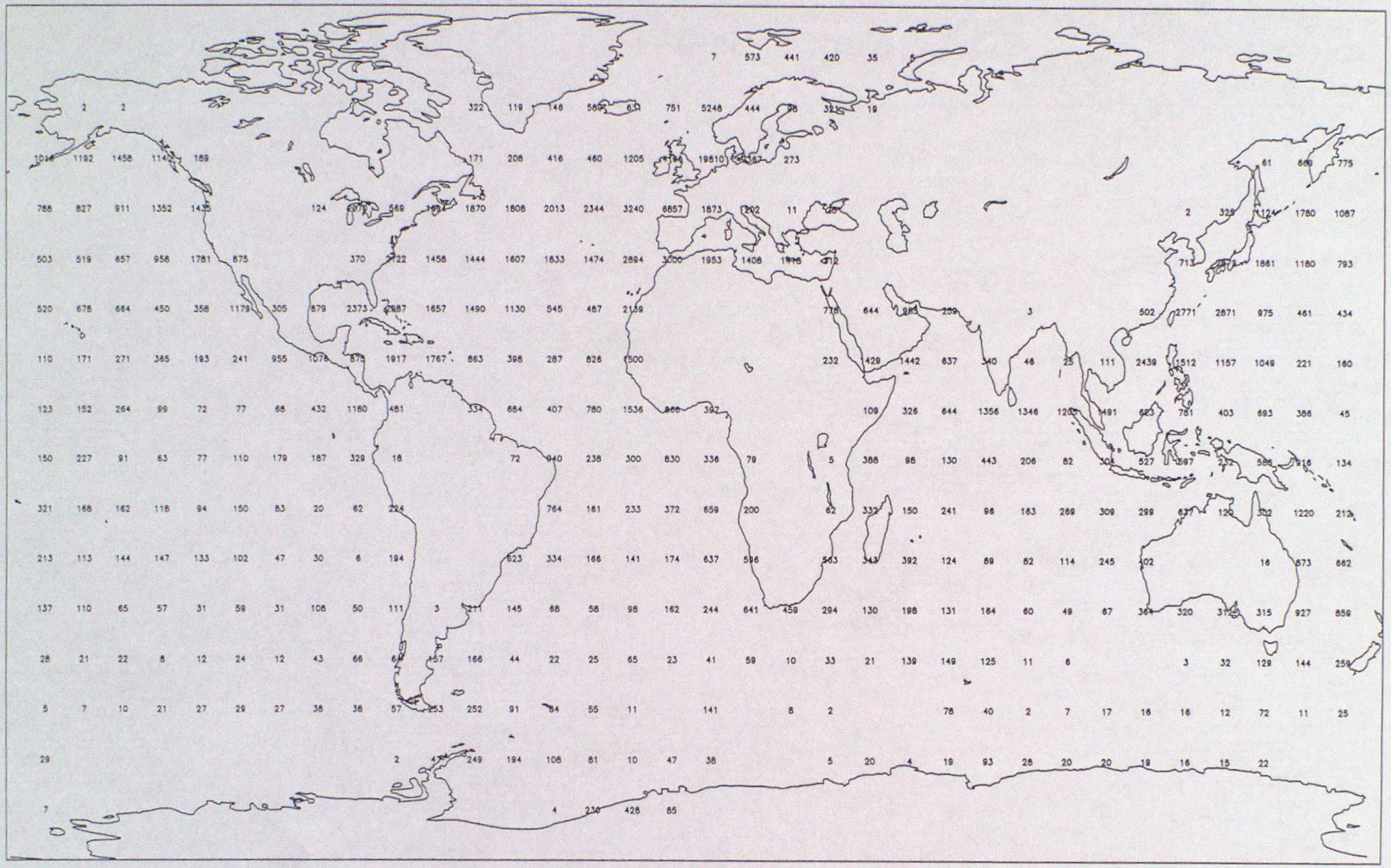


FIG 16:
NUMBER OF FIXED BUOY SEA-SURFACE TEMPERATURE OBSERVATIONS
DATE:- JANUARY - APRIL 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL ARE INCLUDED

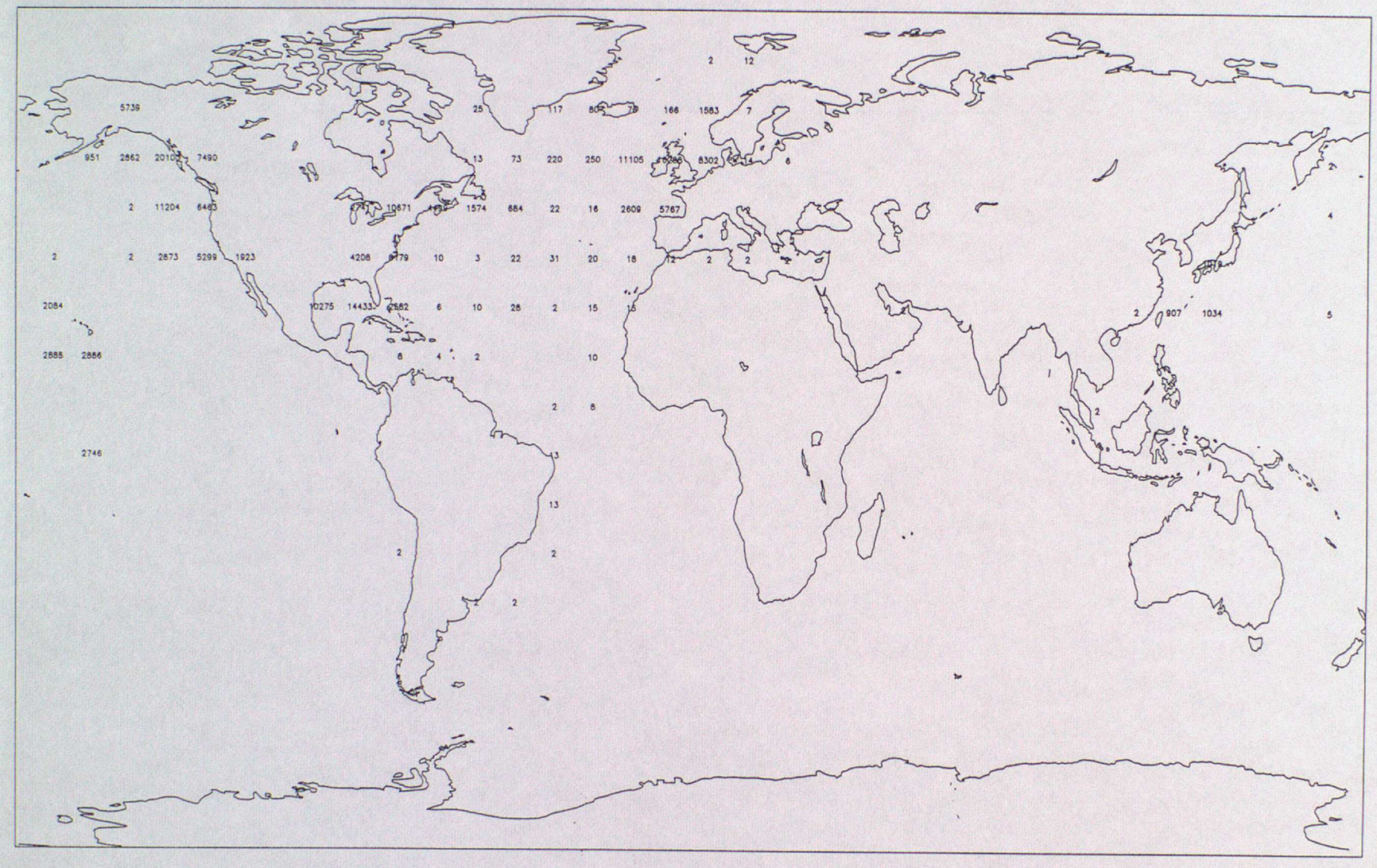
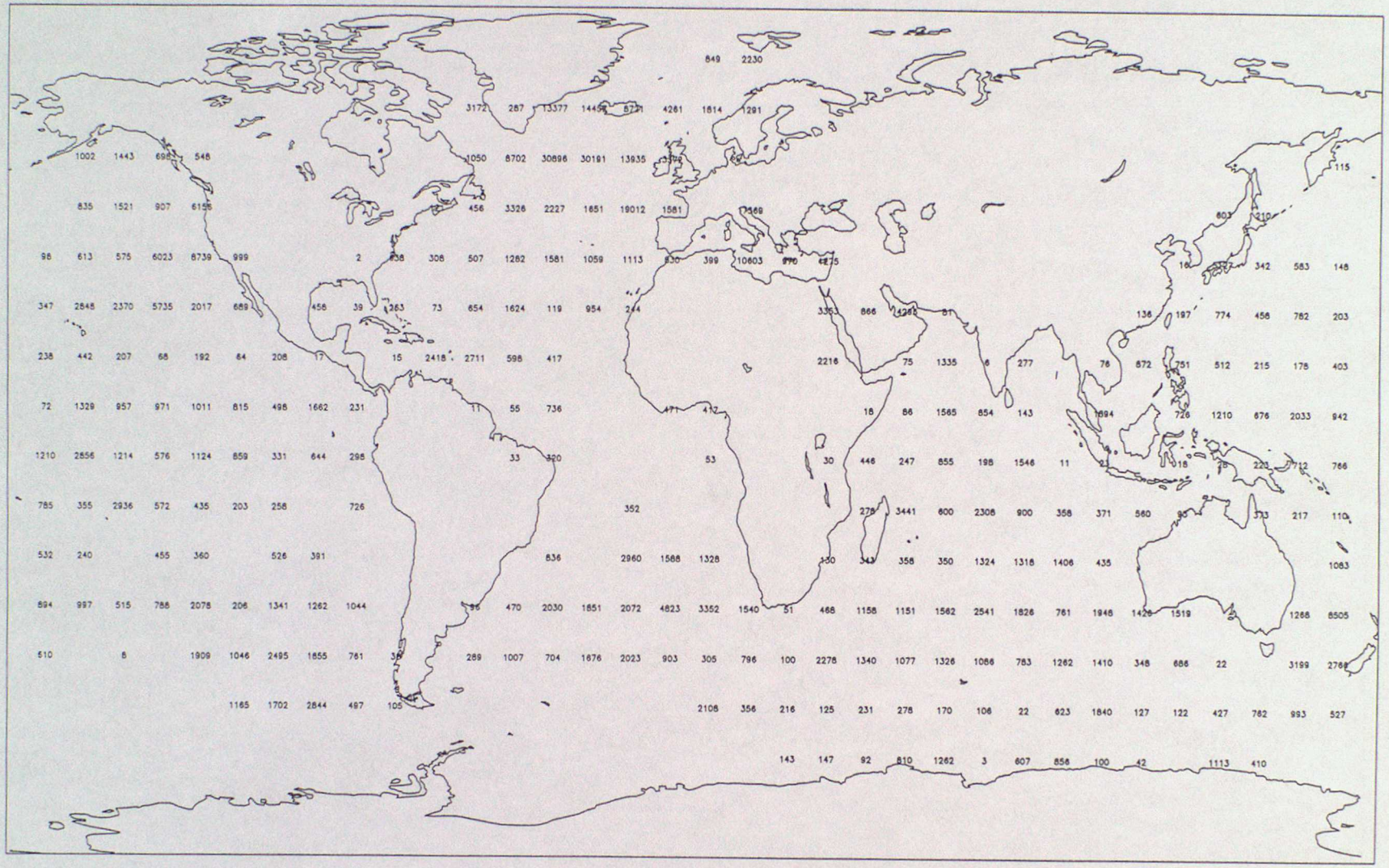


FIG 17:
NUMBER OF DRIFTING BUOY SEA-SURFACE TEMPERATURE OBSERVATIONS
DATE:- JANUARY - APRIL 1998
ONLY OBSERVATIONS PASSING QUALITY CONTROL ARE INCLUDED



O-B pressure (hPa) for identifier 31527
Number of obs. plotted = 163 Number of outliers = 5
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 31530
Number of obs. plotted = 128 Number of outliers = 25
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 33505
Number of obs. plotted = 192 Number of outliers = 2
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 33574
Number of obs. plotted = 282 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 33578
Number of obs. plotted = 693 Number of outliers = 13
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 46905
Number of obs. plotted = 459 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 47543
Number of obs. plotted = 77 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 47550
Number of obs. plotted = 407 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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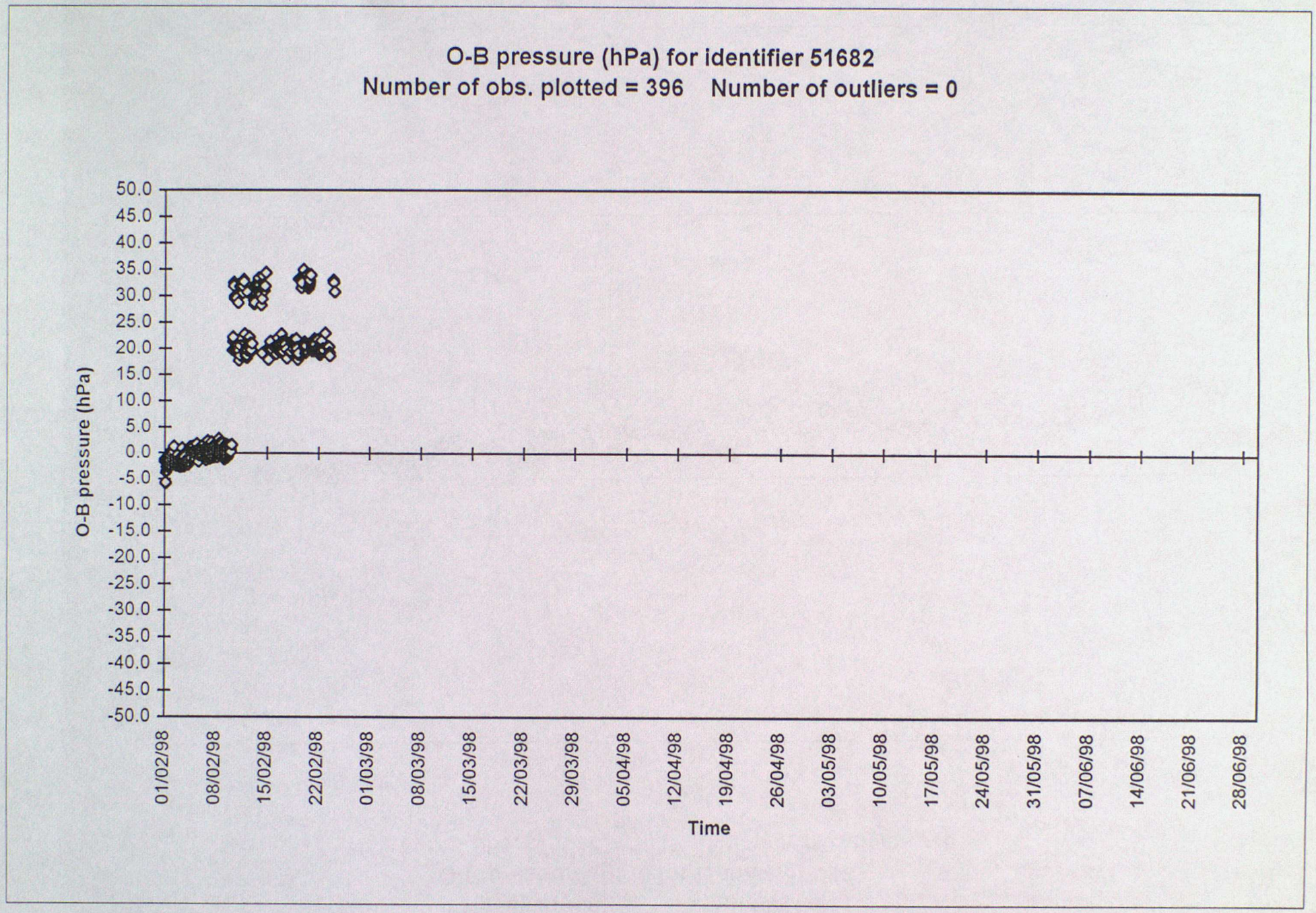
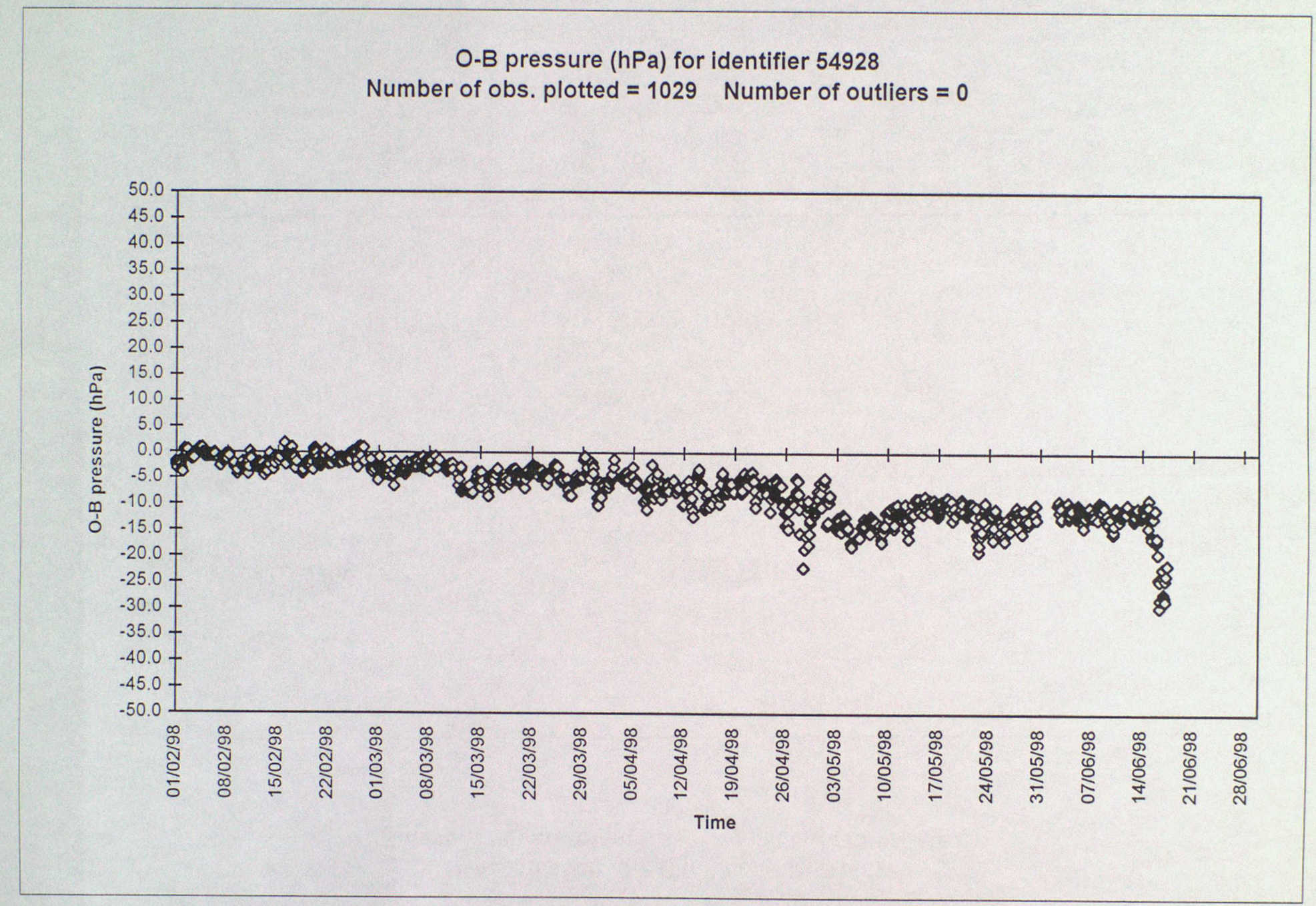
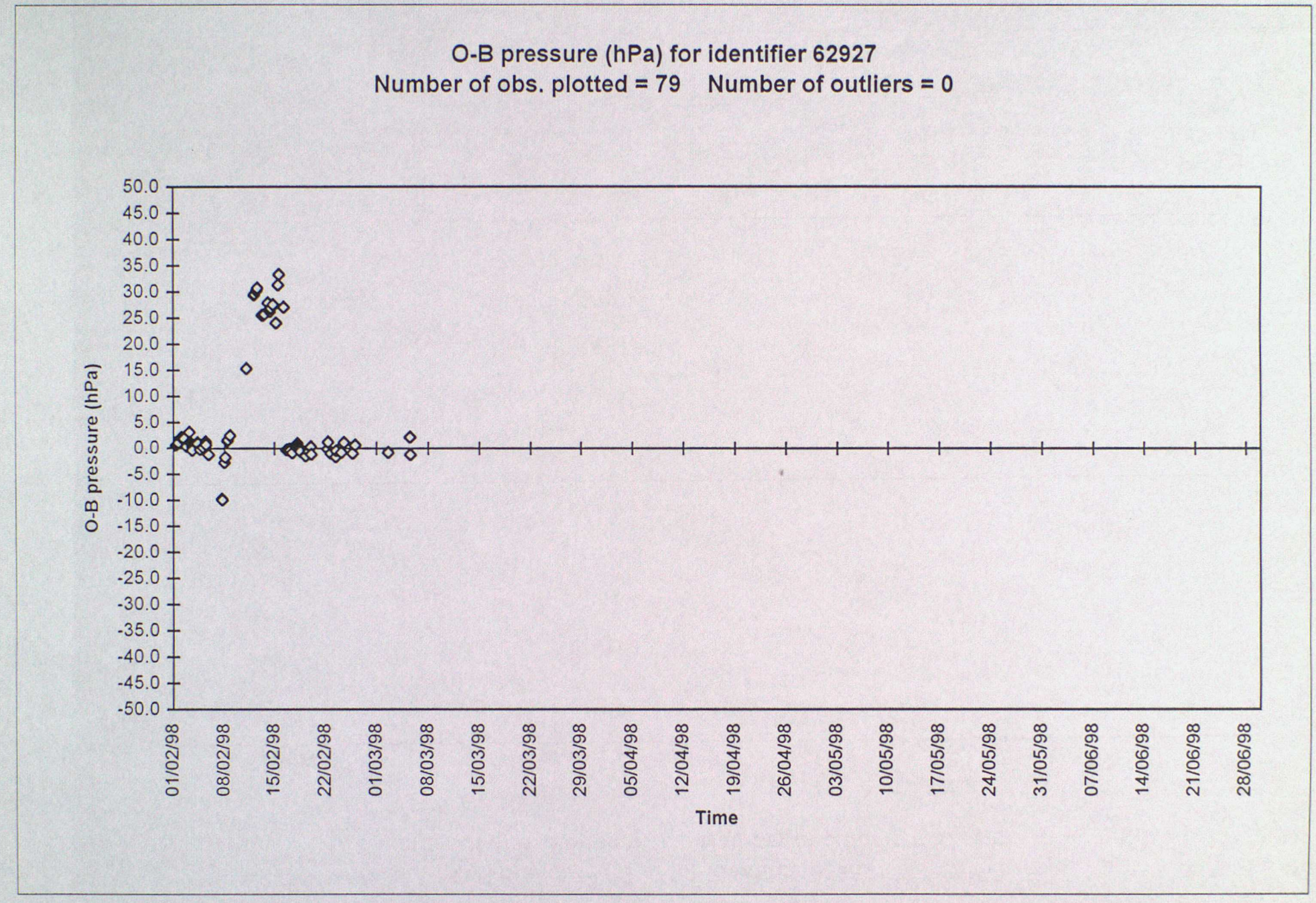
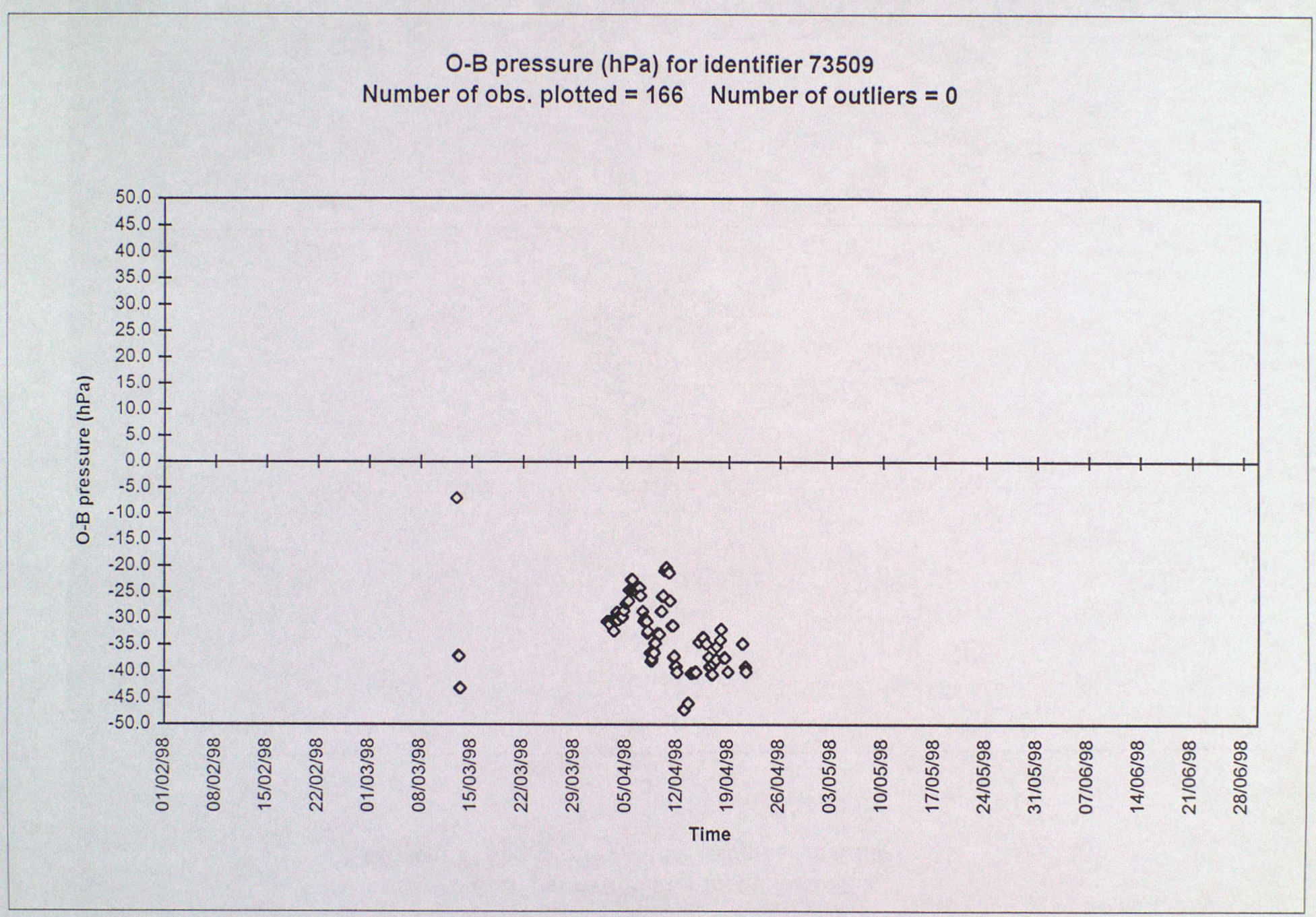
07/06/98
14/06/98
21/06/98
28/06/98

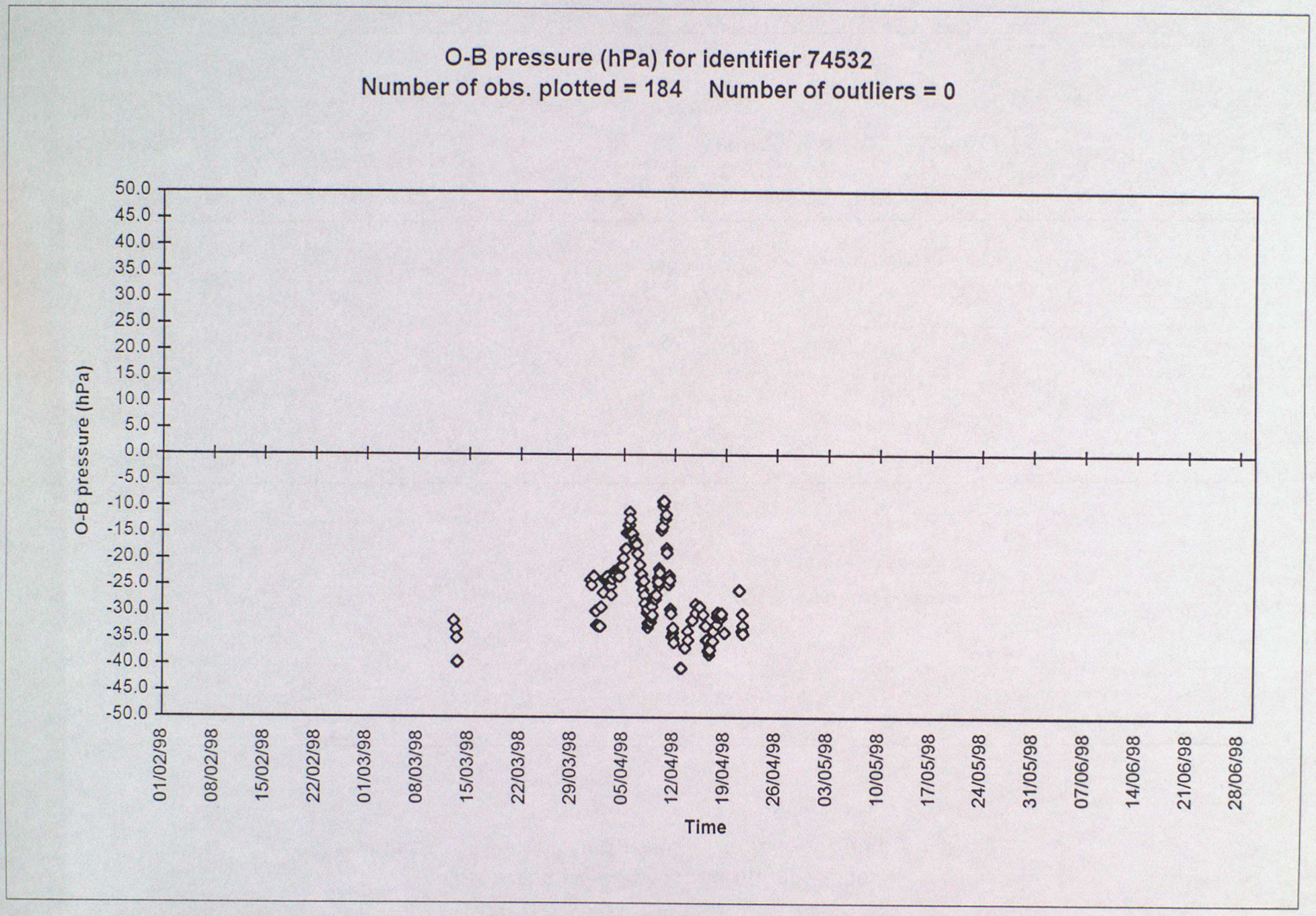

O-B pressure (hPa) for identifier 51682
Number of obs. plotted = 396 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

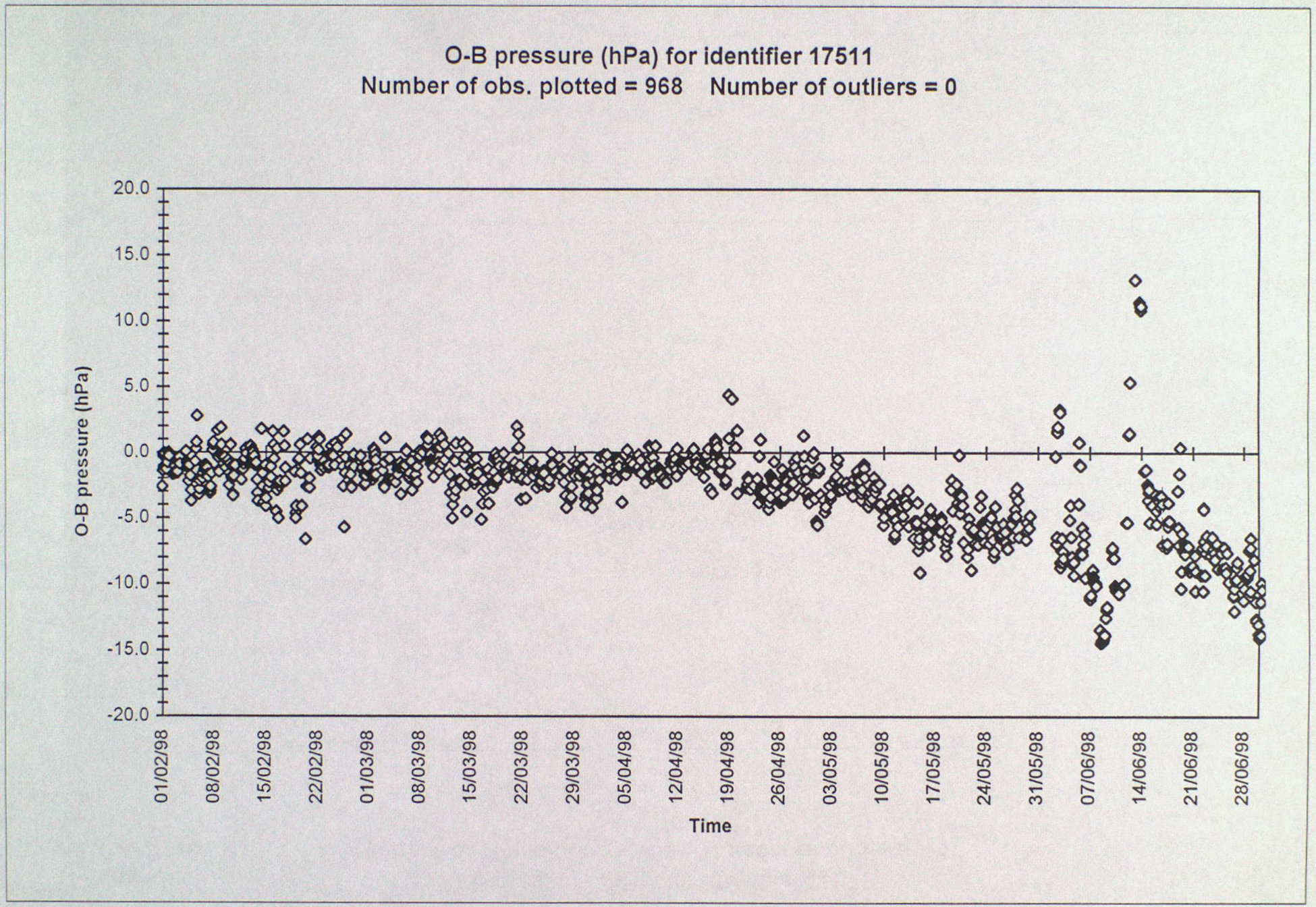

O-B pressure (hPa) for identifier 54928
Number of obs. plotted = 1029 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier 62927
Number of obs. plotted = 79 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

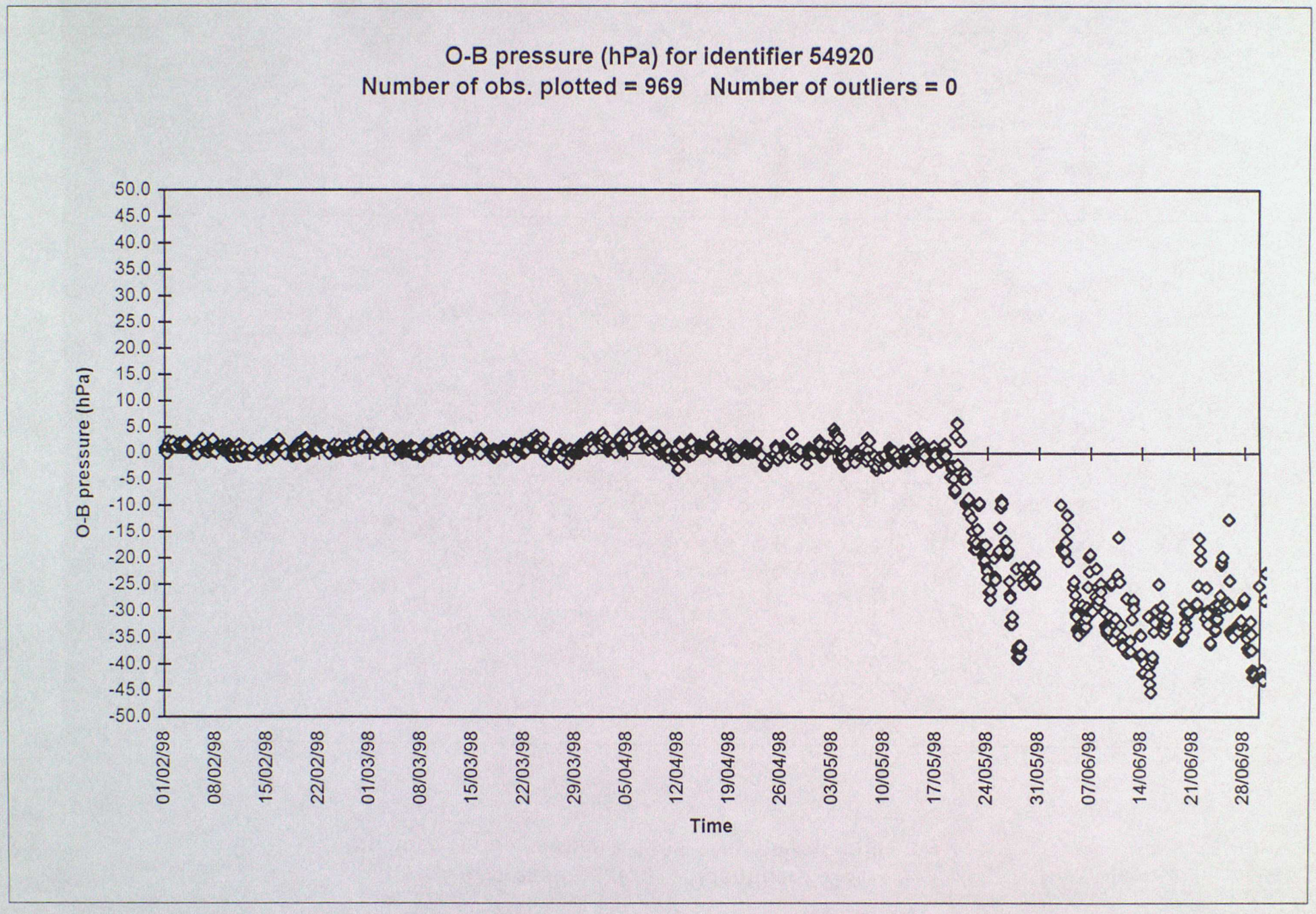
O-B pressure (hPa) for identifier 63662
Number of obs. plotted = 40 Number of outliers = 32
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

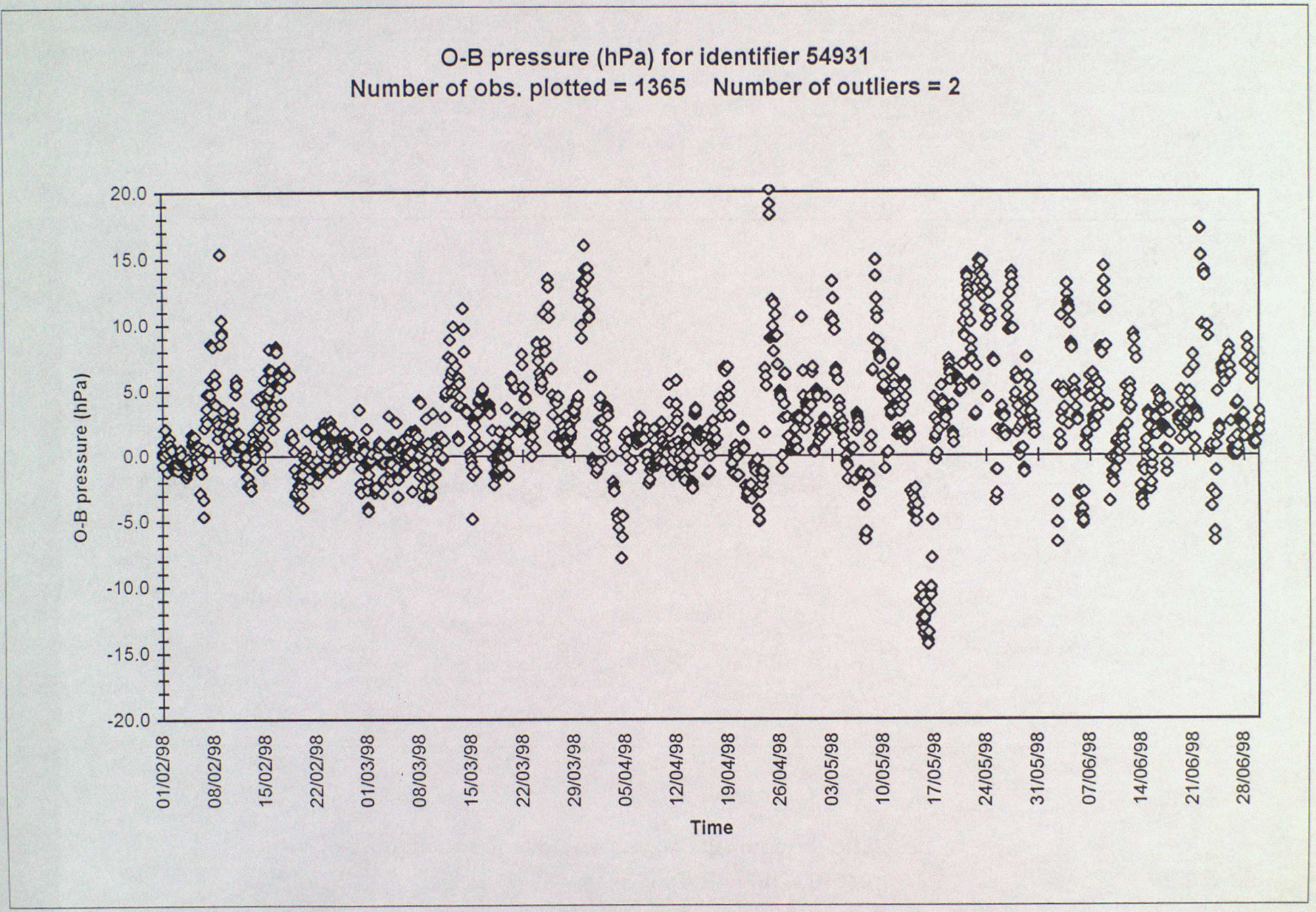

O-B pressure (hPa) for identifier 73509
Number of obs. plotted = 166 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

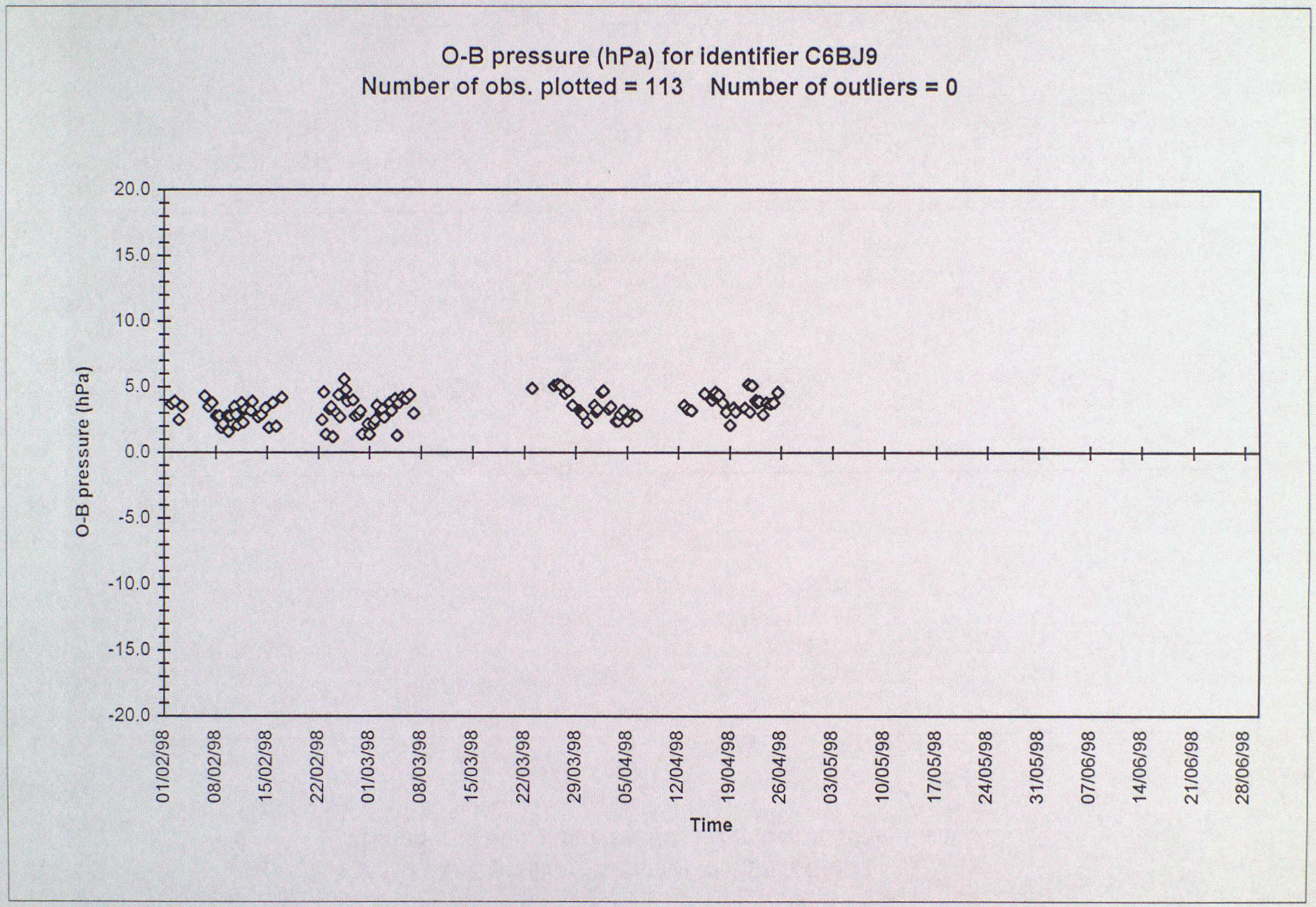

O-B pressure (hPa) for identifier 74532
Number of obs. plotted = 184 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier 17511
Number of obs. plotted = 968 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 33572
Number of obs. plotted = 959 Number of outliers = 10
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98


O-B pressure (hPa) for identifier 54920
Number of obs. plotted = 969 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier 54931
Number of obs. plotted = 1365 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier C6BJ9
Number of obs. plotted = 113 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier C6FA6
Number of obs. plotted = 105 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier C6HQ05
Number of obs. plotted = 42 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier C6HQ06
Number of obs. plotted = 46 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier C6IL3
Number of obs. plotted = 44 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier DUWH
Number of obs. plotted = 459 Number of outliers = 1
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier ELTE6
Number of obs. plotted = 211 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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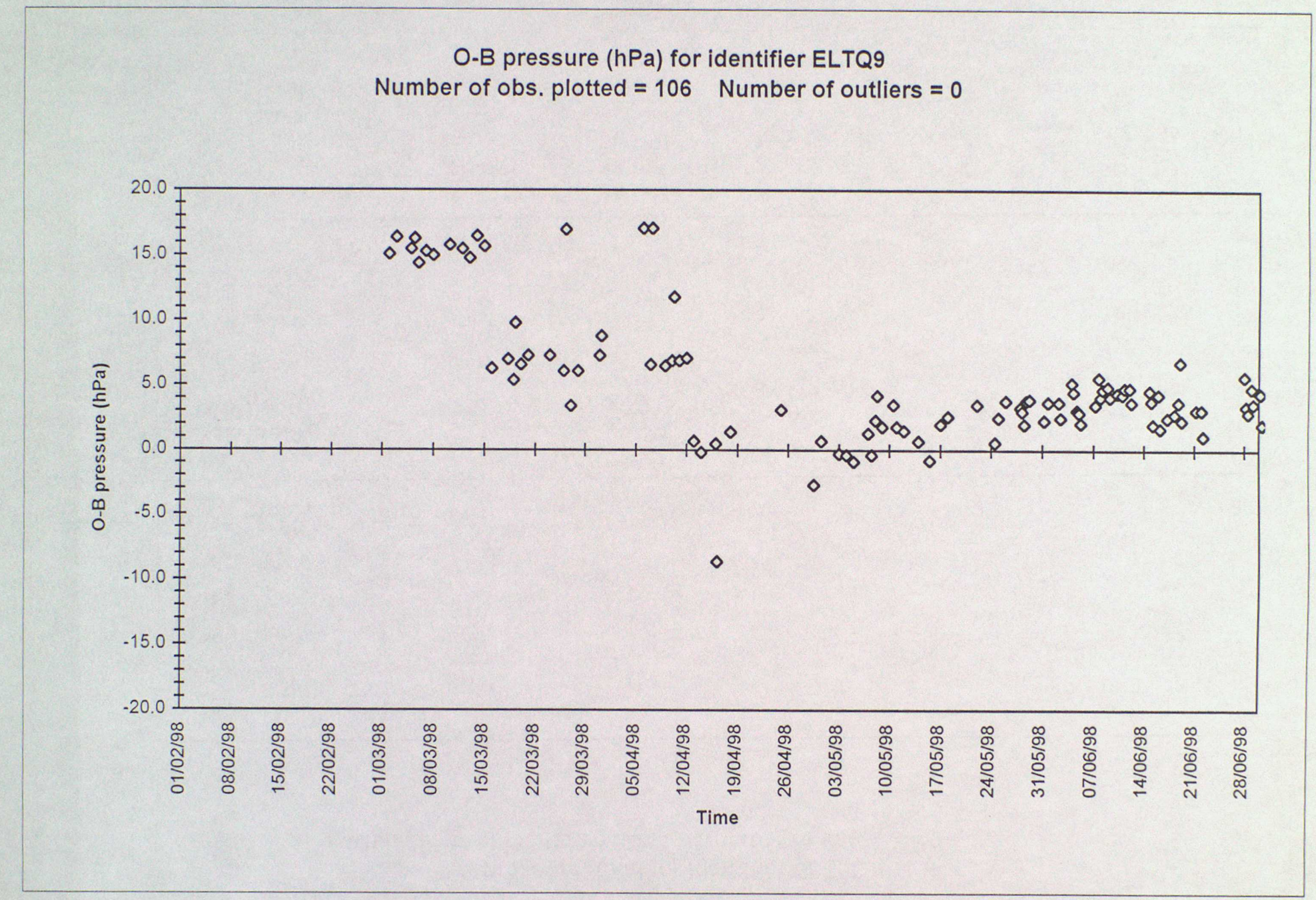
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98


O-B pressure (hPa) for identifier ELTQ9
Number of obs. plotted = 106 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier ELUB5
Number of obs. plotted = 395 Number of outliers = 7
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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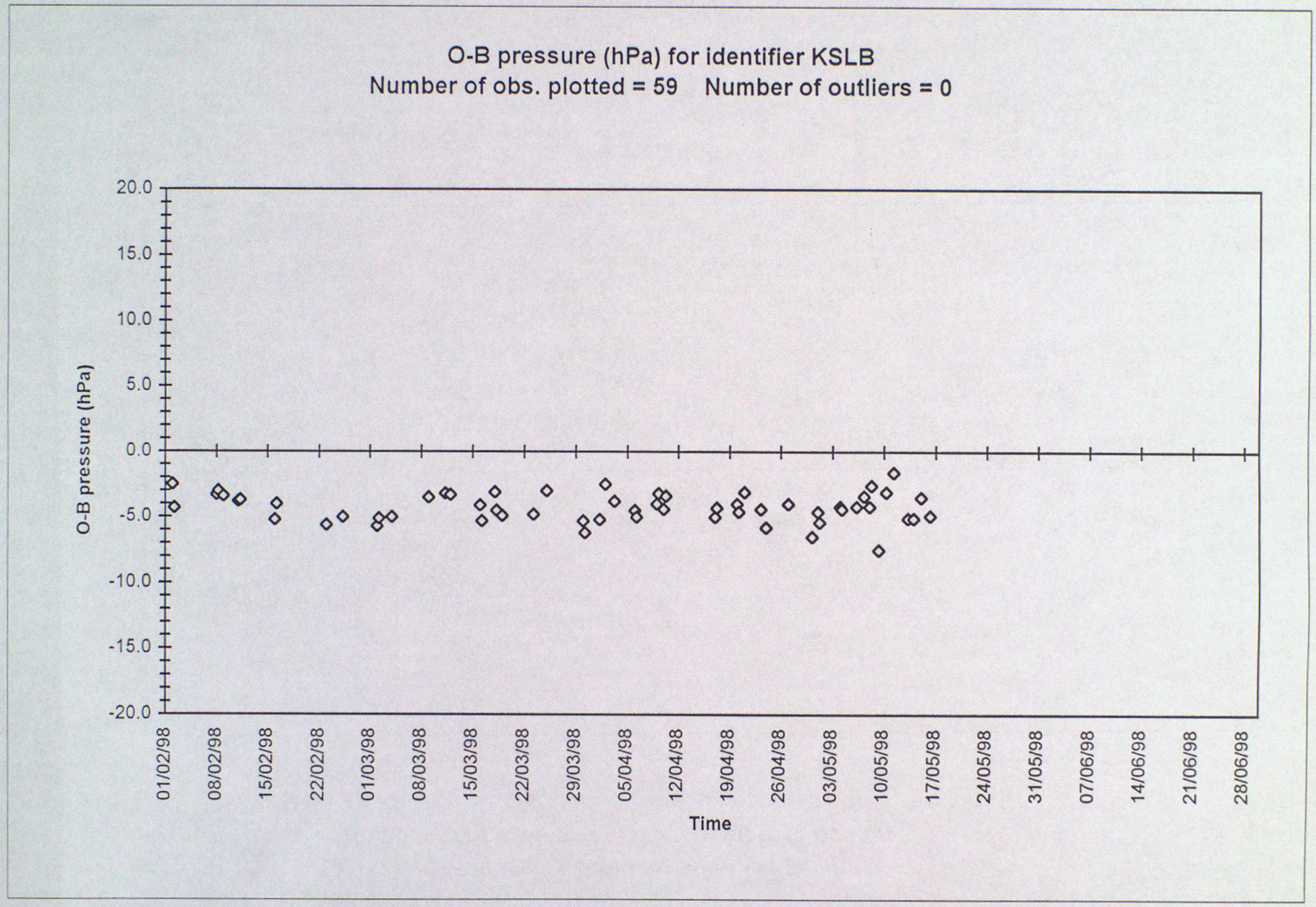
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

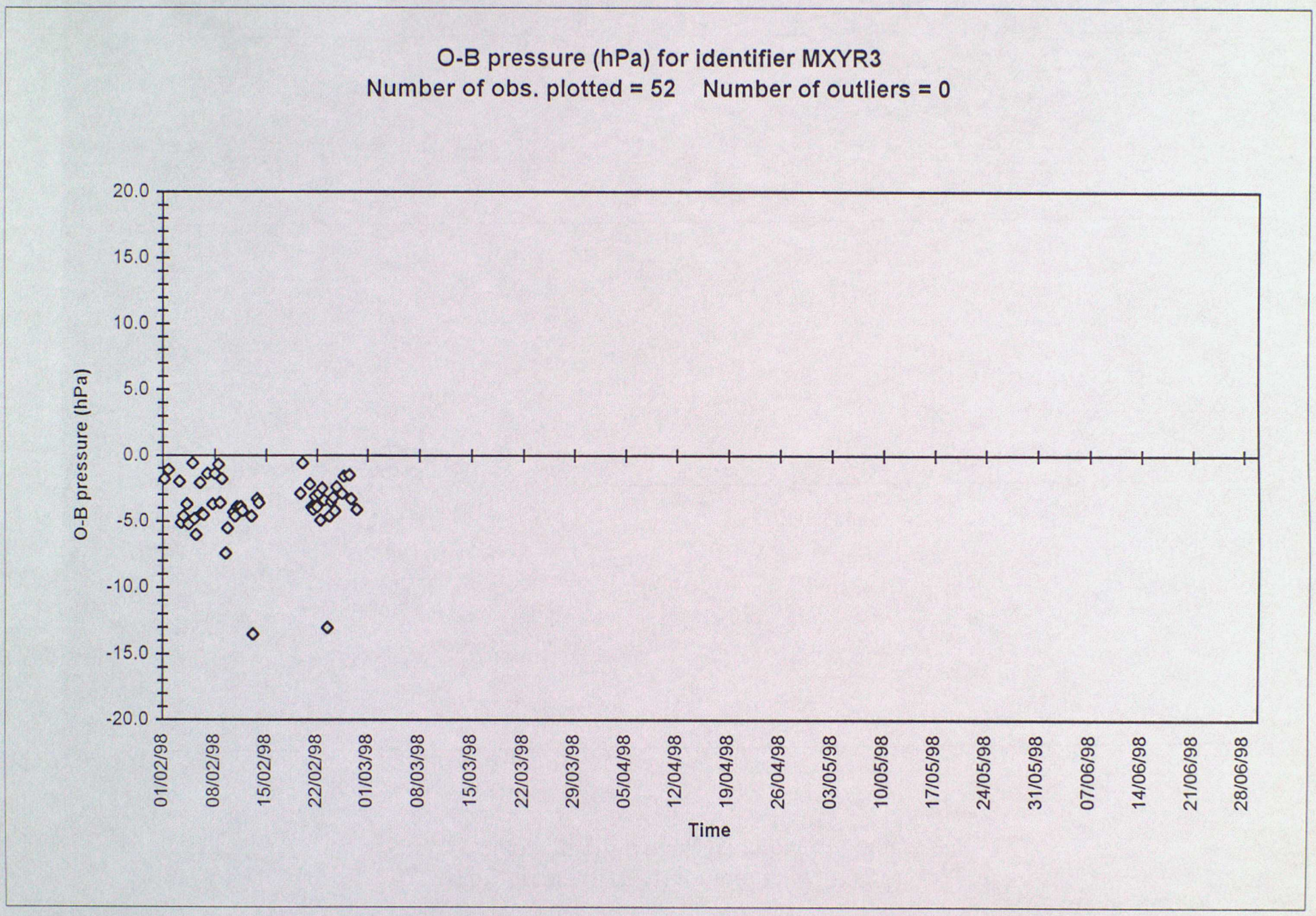

O-B pressure (hPa) for identifier KSLB
Number of obs. plotted = 59 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier LAXP
Number of obs. plotted = 41 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier MVQN
Number of obs. plotted = 44 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier MVQN8
Number of obs. plotted = 98 Number of outliers = 1
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier MWZD2
Number of obs. plotted = 86 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98


O-B pressure (hPa) for identifier MXYR3
Number of obs. plotted = 52 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier OXPW
Number of obs. plotted = 96 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier PCBU
Number of obs. plotted = 48 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier PCCZ
Number of obs. plotted = 43 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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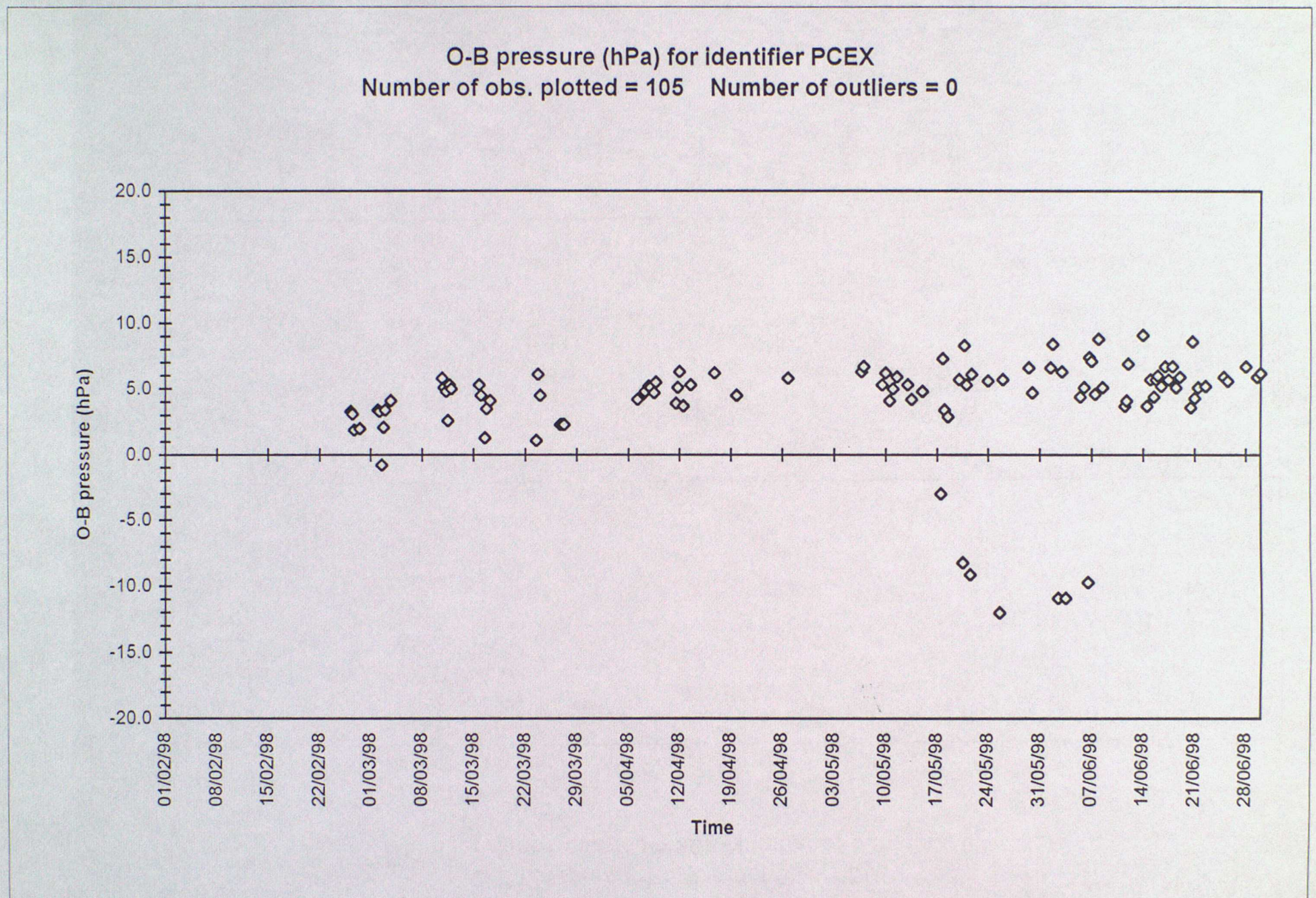
21/06/98
28/06/98

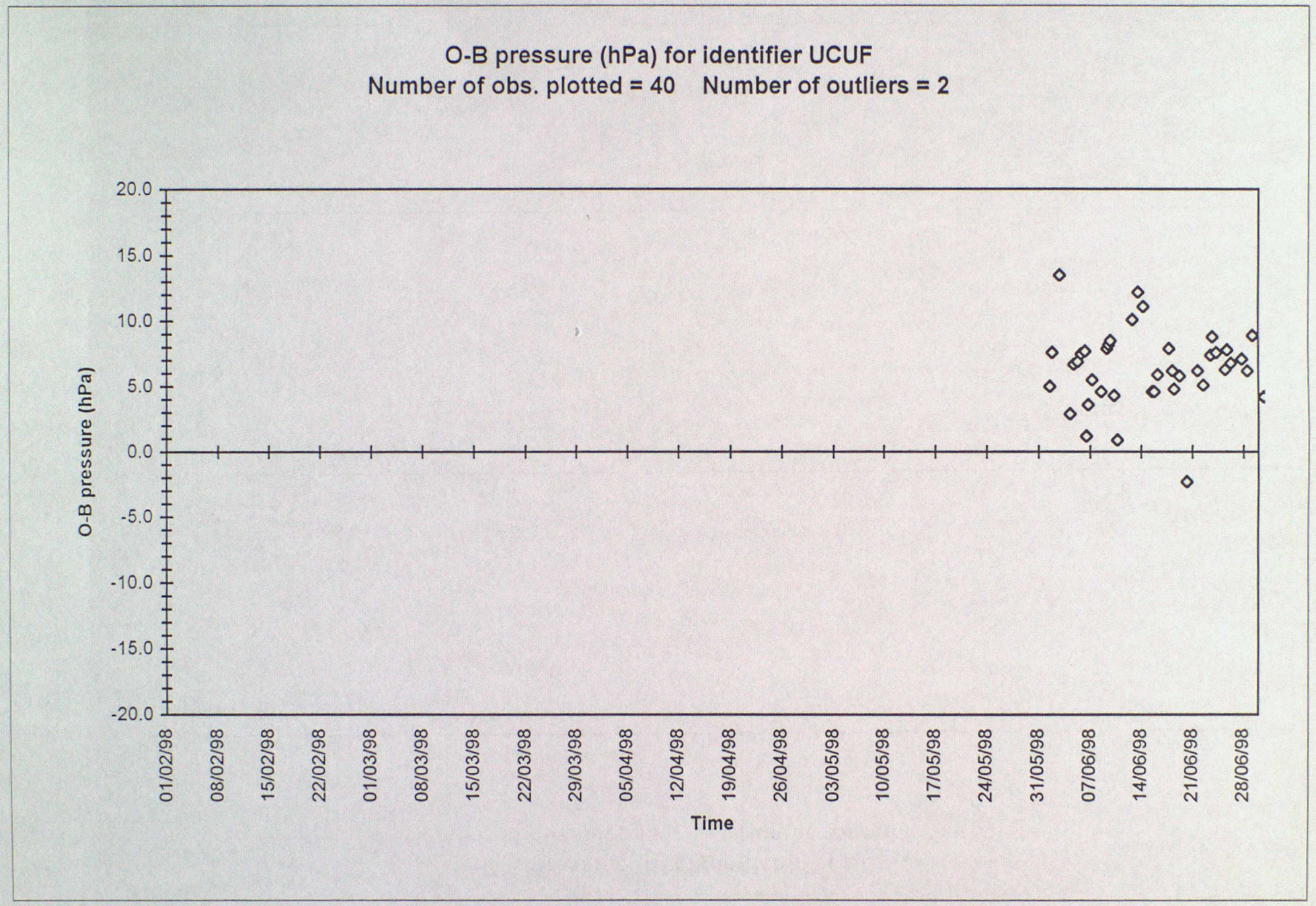

O-B pressure (hPa) for identifier PCEX
Number of obs. plotted = 105 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier PEUQ
Number of obs. plotted = 92 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier UAMS
Number of obs. plotted = 147 Number of outliers = 4
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier UAMY
Number of obs. plotted = 45 Number of outliers = 14
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier UCAC
Number of obs. plotted = 27 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

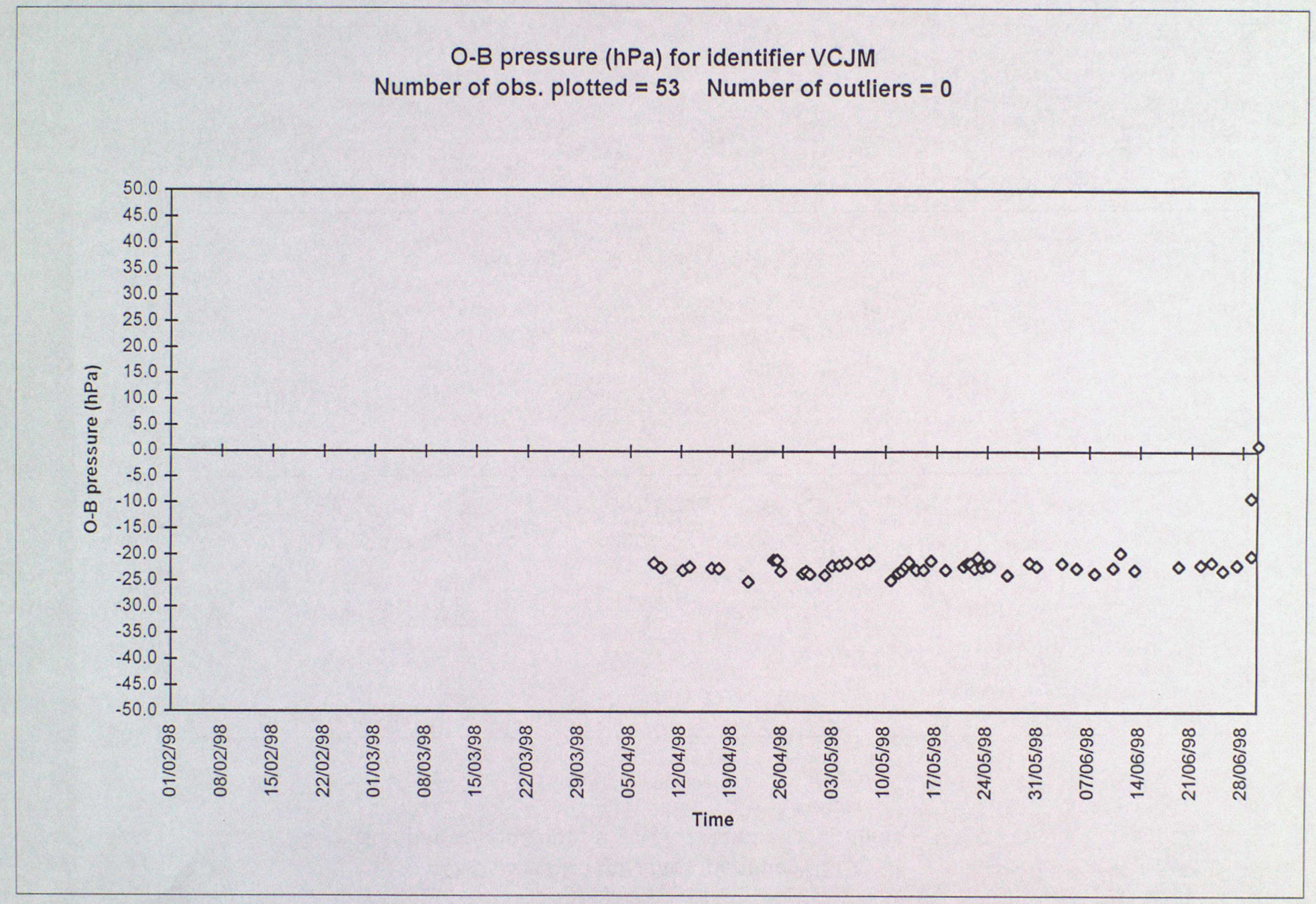

O-B pressure (hPa) for identifier UCUF
Number of obs. plotted = 40 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

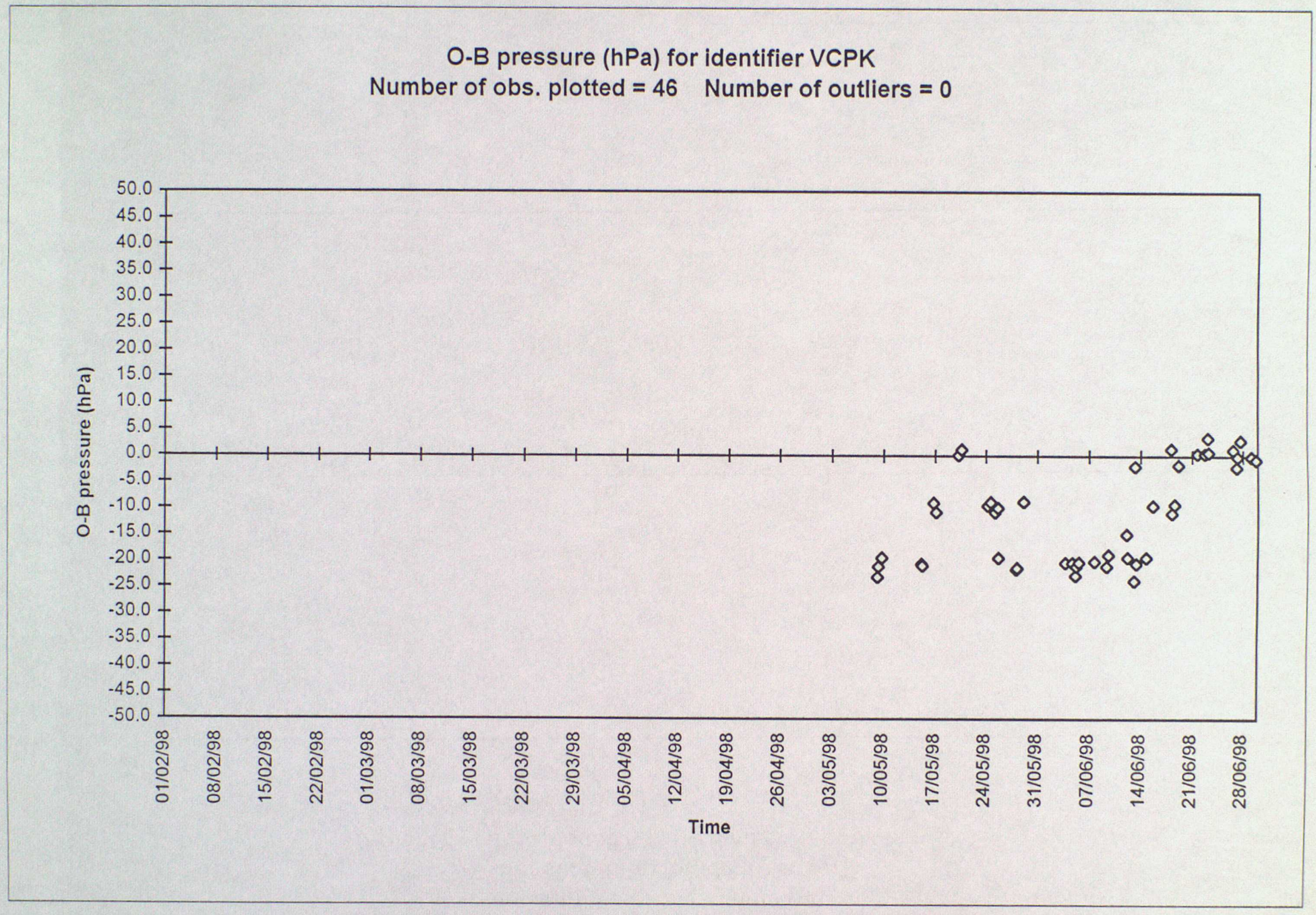
O-B pressure (hPa) for identifier UDYN
Number of obs. plotted = 49 Number of outliers = 9
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

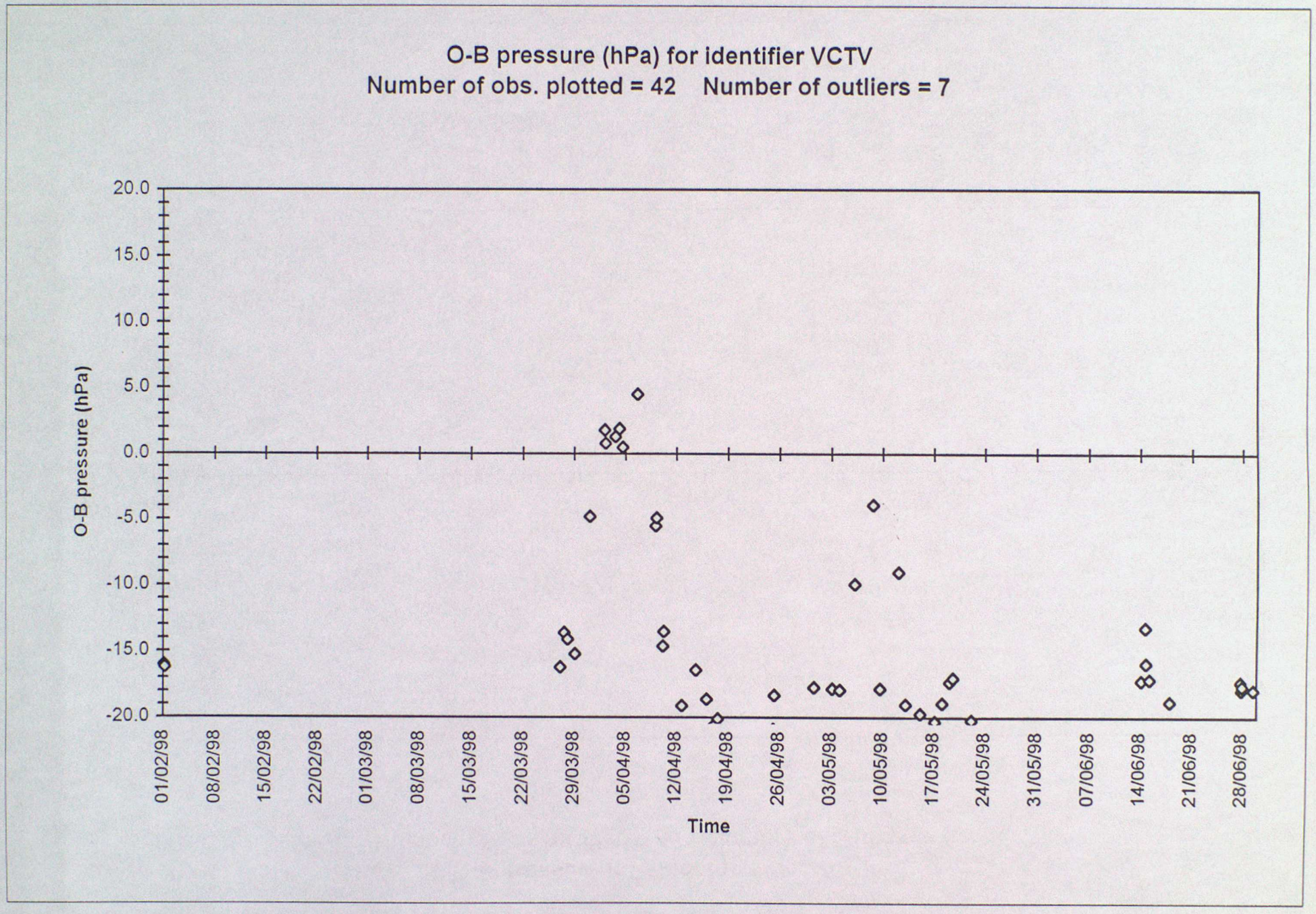
O-B pressure (hPa) for identifier UJNC
Number of obs. plotted = 42 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

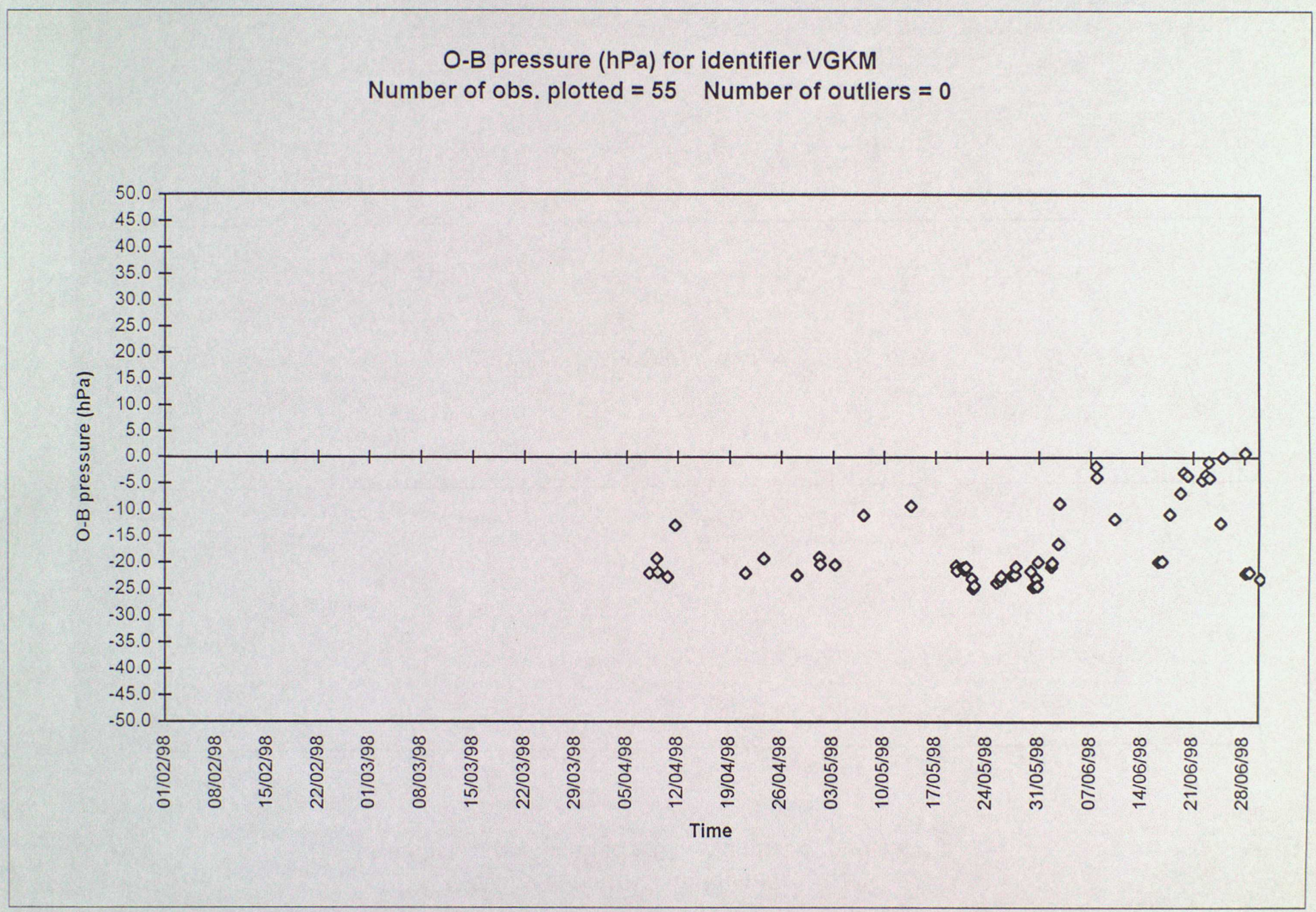
O-B pressure (hPa) for identifier UQDB
Number of obs. plotted = 59 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

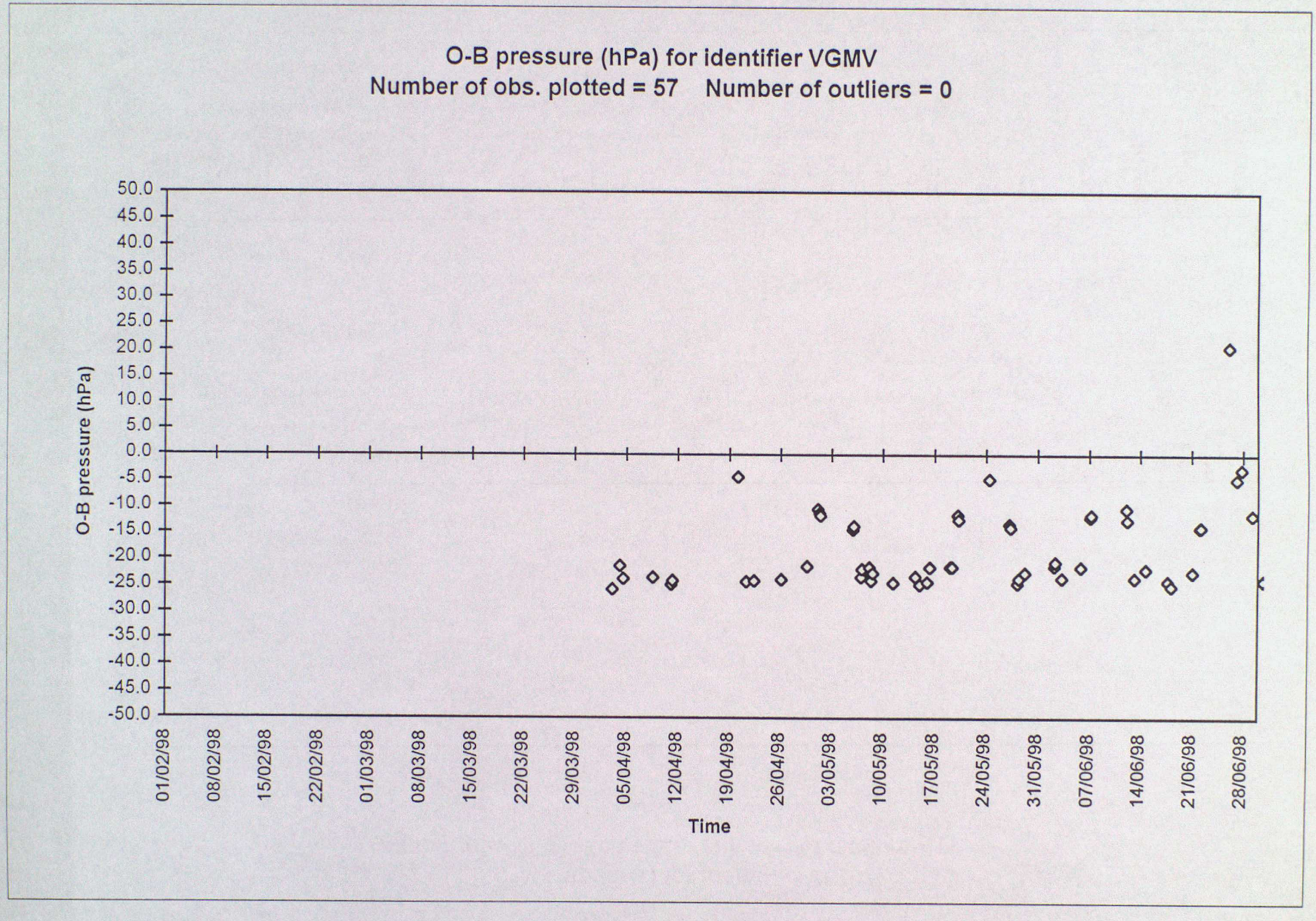
O-B pressure (hPa) for identifier USIS
Number of obs. plotted = 177 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier VCJM
Number of obs. plotted = 53 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier VCPK
Number of obs. plotted = 46 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier VCTV
Number of obs. plotted = 42 Number of outliers = 7
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier VGKM
Number of obs. plotted = 55 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B pressure (hPa) for identifier VGMV
Number of obs. plotted = 57 Number of outliers = 0
O-B pressure (hPa)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
-35.0
-40.0
-45.0
-50.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier VRUS7
Number of obs. plotted = 74 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier VTCND
Number of obs. plotted = 55 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier VVGG
Number of obs. plotted = 58 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier V2XO
Number of obs. plotted = 194 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier V7AS7
Number of obs. plotted = 47 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier V7AW8
Number of obs. plotted = 140 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
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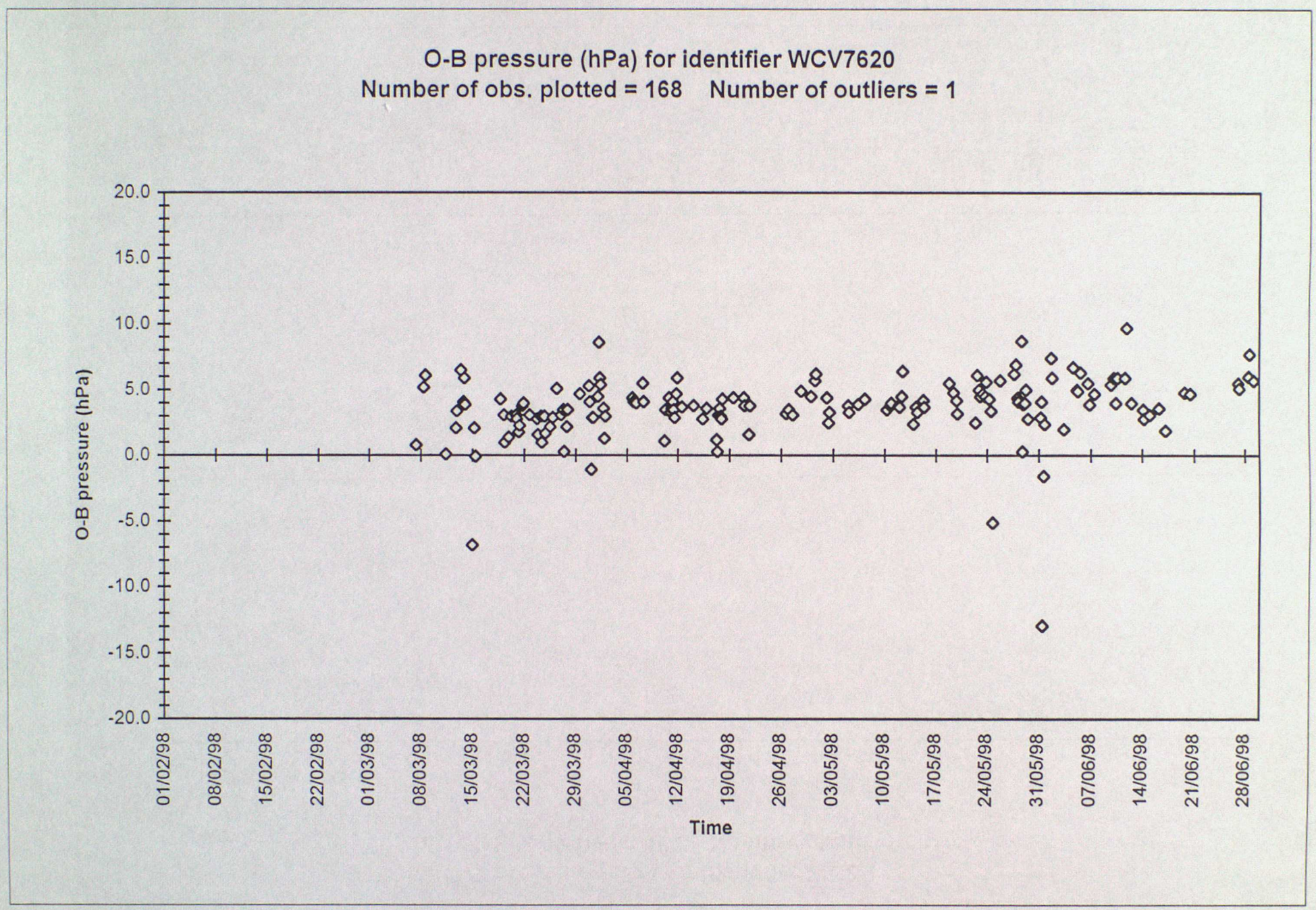
28/06/98


O-B pressure (hPa) for identifier WCV7620
Number of obs. plotted = 168 Number of outliers = 1
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier WDZB
Number of obs. plotted = 180 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier WFLH
Number of obs. plotted = 228 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier WRGL
Number of obs. plotted = 68 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

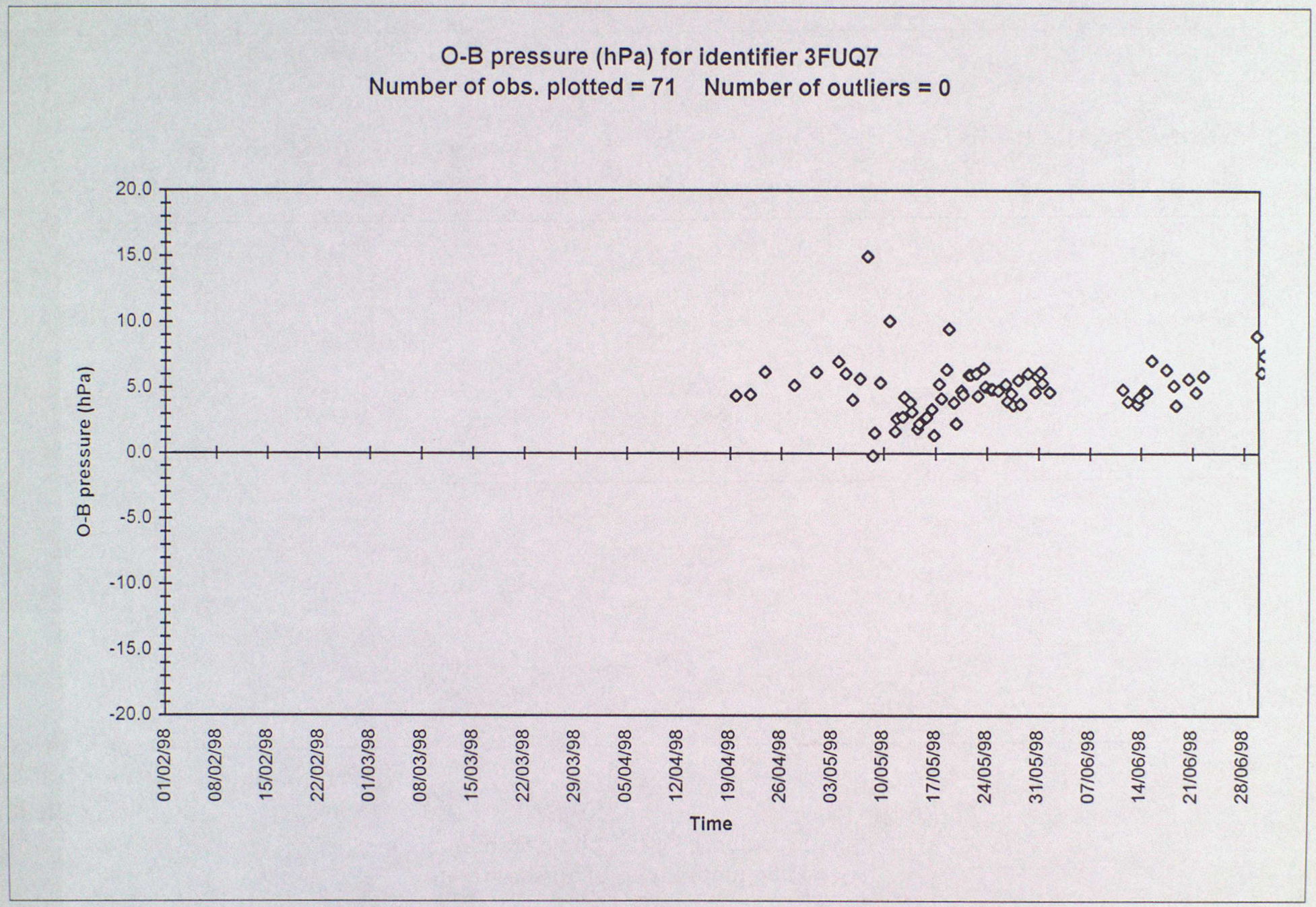
O-B pressure (hPa) for identifier XLW363
Number of obs. plotted = 51 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier XYKX
Number of obs. plotted = 47 Number of outliers = 6
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 3FGN3
Number of obs. plotted = 73 Number of outliers = 3
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 3FTJ4
Number of obs. plotted = 34 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 3FUD4
Number of obs. plotted = 95 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98


O-B pressure (hPa) for identifier 3FUQ7
Number of obs. plotted = 71 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 9VHU
Number of obs. plotted = 38 Number of outliers = 2
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B pressure (hPa) for identifier 9VIH
Number of obs. plotted = 58 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 9VPK
Number of obs. plotted = 63 Number of outliers = 1
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B pressure (hPa) for identifier 9WCR3
Number of obs. plotted = 53 Number of outliers = 0
O-B pressure (hPa)
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier 44624
Number of obs. plotted = 1796 Number of outliers = 4
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier 62803
Number of obs. plotted = 1013 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier 52657
Number of obs. plotted = 180 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier DQVK
Number of obs. plotted = 259 Number of outliers = 1
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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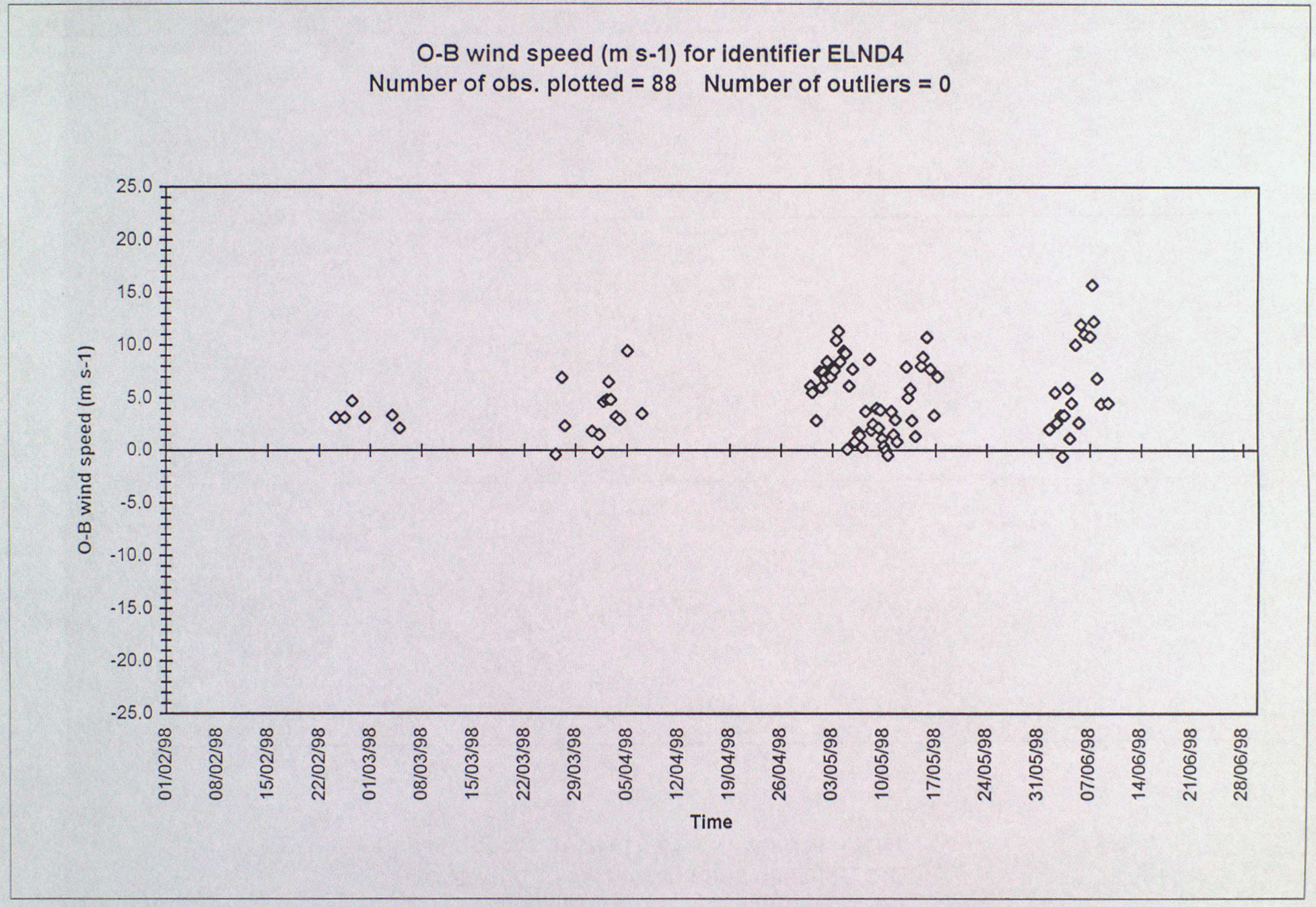
07/06/98
14/06/98
21/06/98
28/06/98


O-B wind speed (m s-1) for identifier ELND4
Number of obs. plotted = 88 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier ELQX8
Number of obs. plotted = 51 Number of outliers = 5
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier ELRR5
Number of obs. plotted = 114 Number of outliers = 2
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier FNTS
Number of obs. plotted = 222 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier LAZK4
Number of obs. plotted = 53 Number of outliers = 1
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier OYCZ
Number of obs. plotted = 50 Number of outliers = 7
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier PDGS
Number of obs. plotted = 57 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier PJOX
Number of obs. plotted = 103 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
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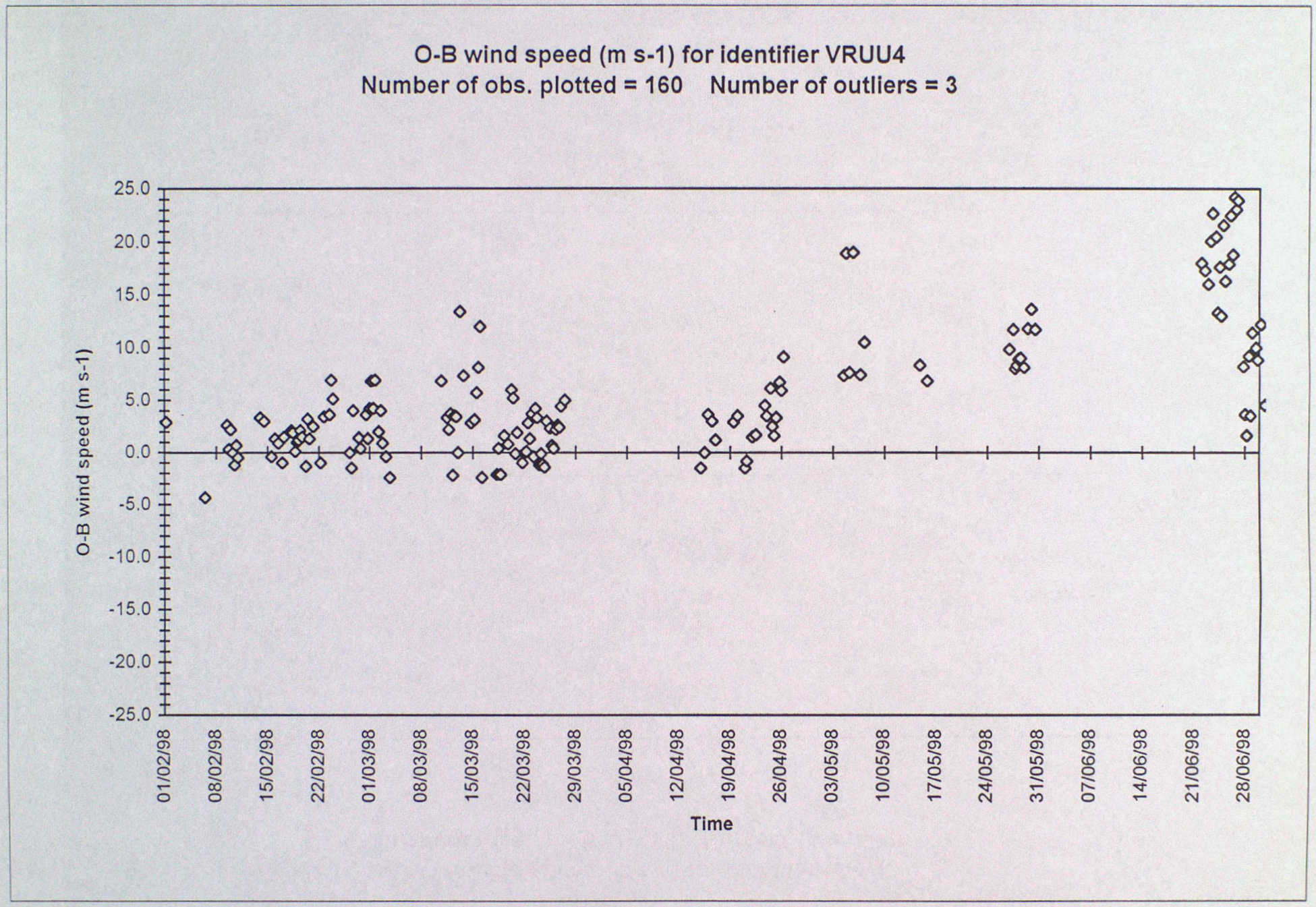
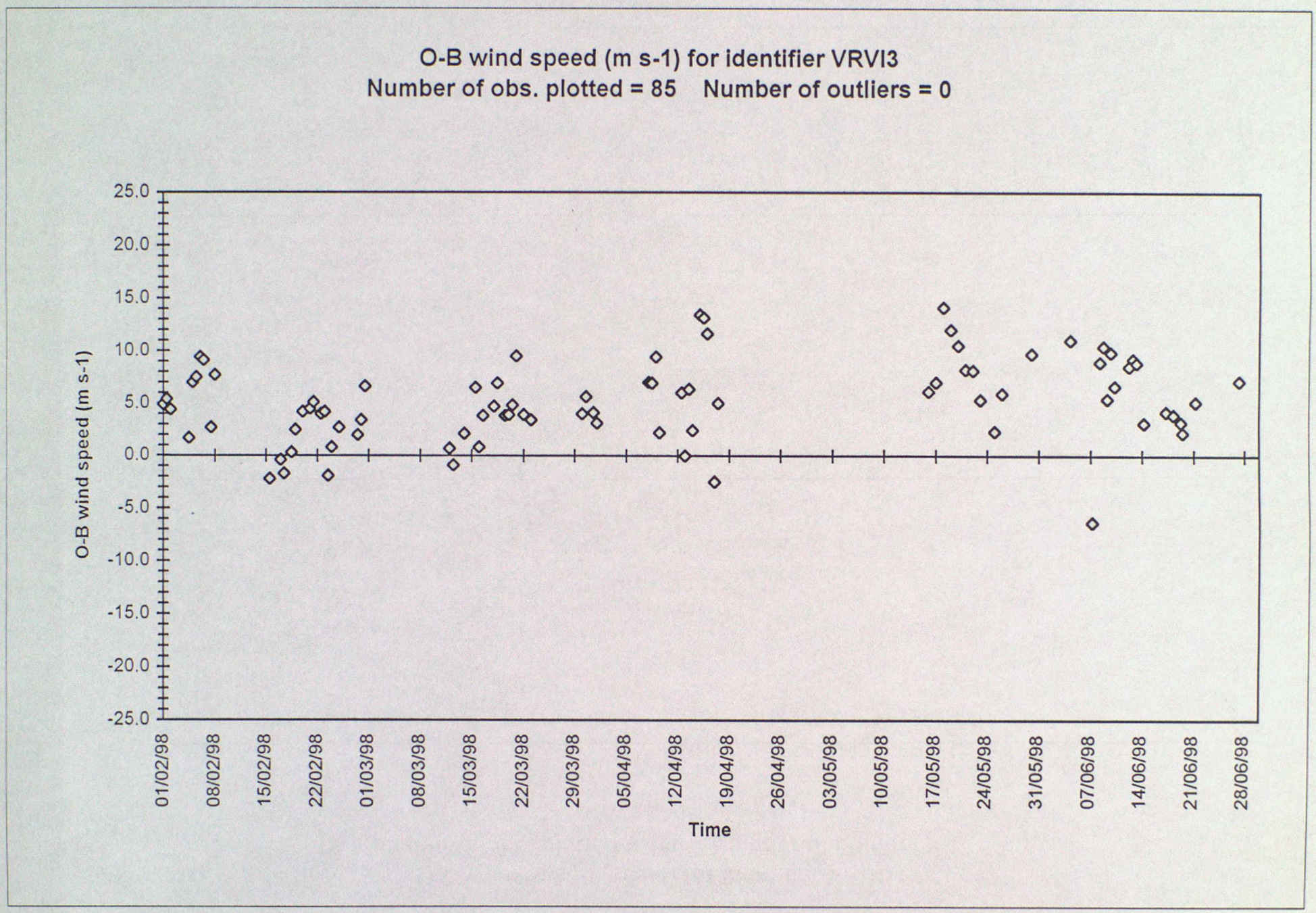
21/06/98
28/06/98

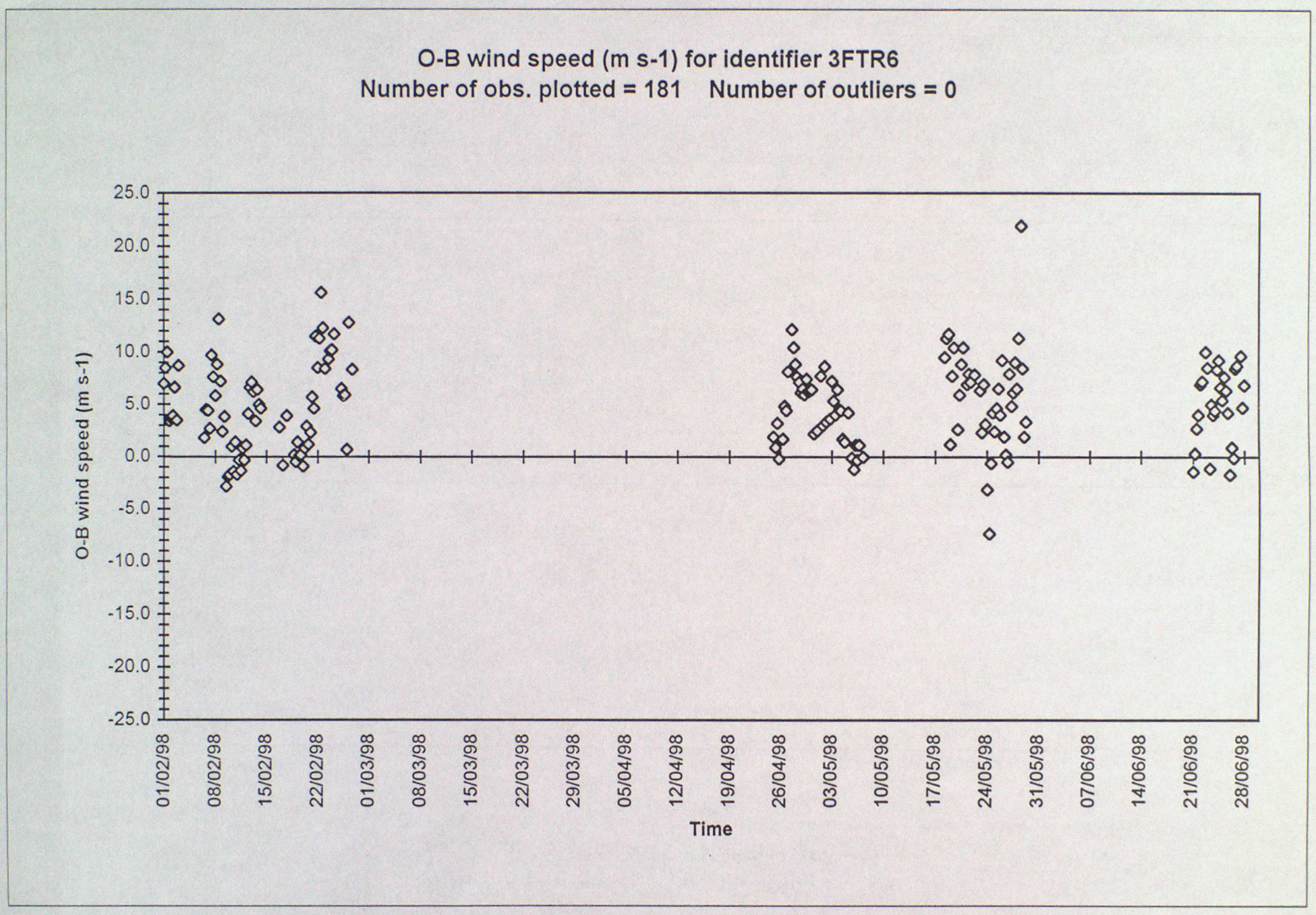

O-B wind speed (m s-1) for identifier VRUU4
Number of obs. plotted = 160 Number of outliers = 3
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B wind speed (m s-1) for identifier VRVI3
Number of obs. plotted = 85 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind speed (m s-1) for identifier XYKX
Number of obs. plotted = 53 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier 3EMJ6
Number of obs. plotted = 247 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind speed (m s-1) for identifier 3ETH4
Number of obs. plotted = 71 Number of outliers = 1
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time


O-B wind speed (m s-1) for identifier 3FTR6
Number of obs. plotted = 181 Number of outliers = 0
O-B wind speed (m s-1)
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98
Time

O-B wind direction (deg.) for identifier 21531
Number of obs. plotted = 759 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind direction (deg.) for identifier 46632
Number of obs. plotted = 1791 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind direction (deg.) for identifier 51015
Number of obs. plotted = 352 Number of outliers = 0

O-B wind direction (deg.) for identifier 52657
Number of obs. plotted = 169 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind direction (deg.) for identifier C60T6
Number of obs. plotted = 84 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind direction (deg.) for identifier 3FRU7
Number of obs. plotted = 231 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-B wind direction (deg.) for identifier 45135
Number of obs. plotted = 932 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

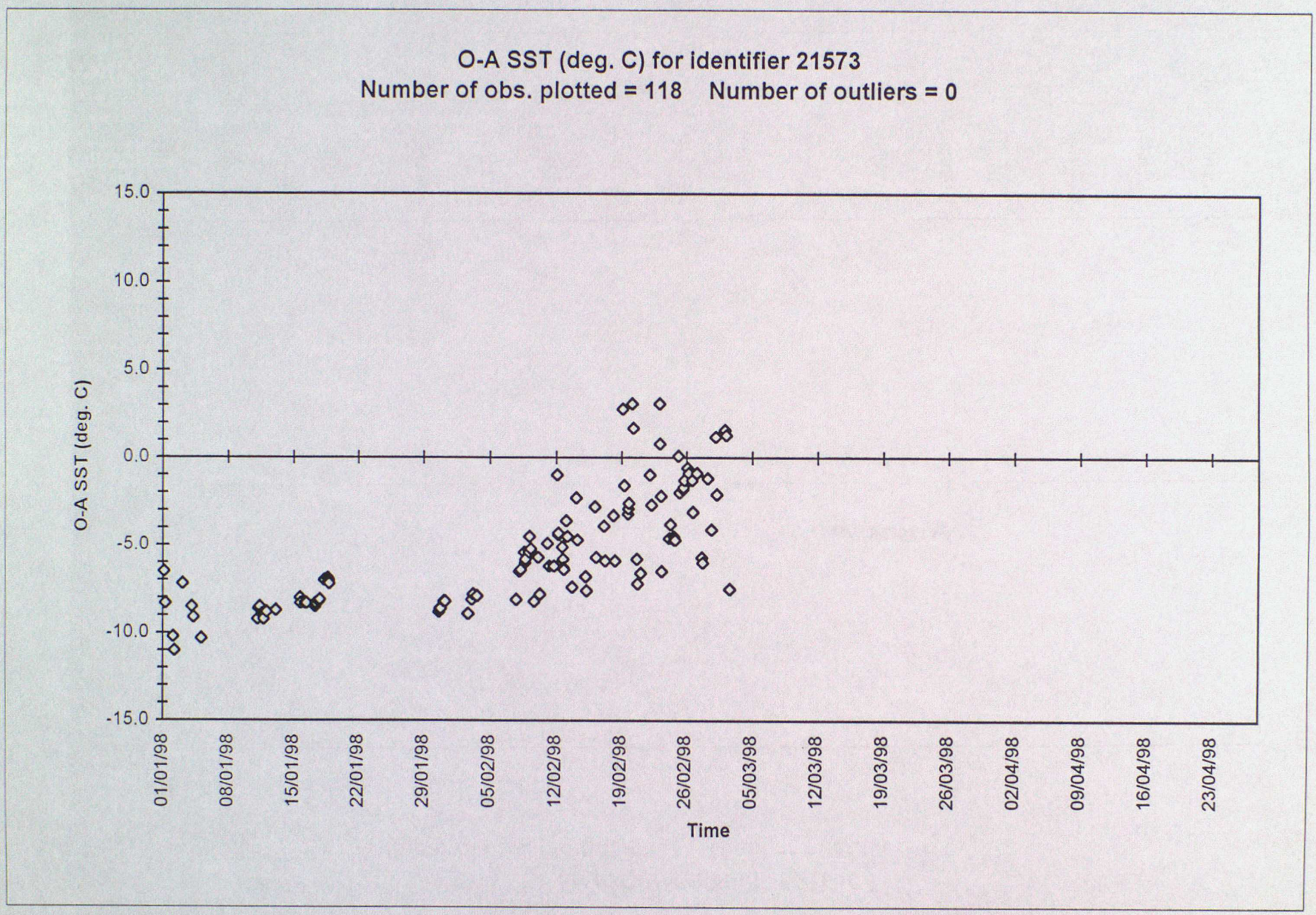
O-B wind direction (deg.) for identifier 62120
Number of obs. plotted = 96 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

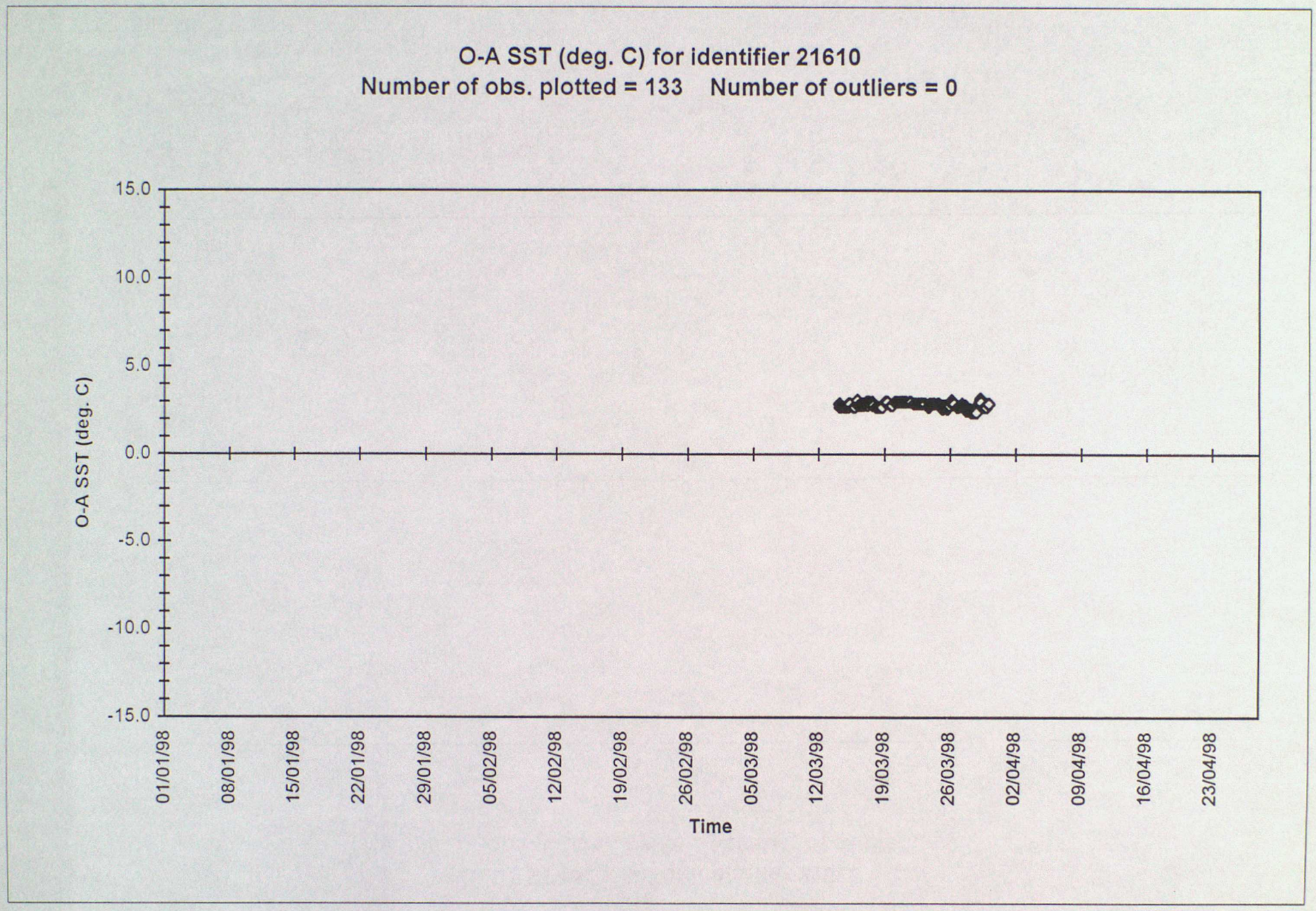
O-B wind direction (deg.) for identifier 62162
Number of obs. plotted = 172 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

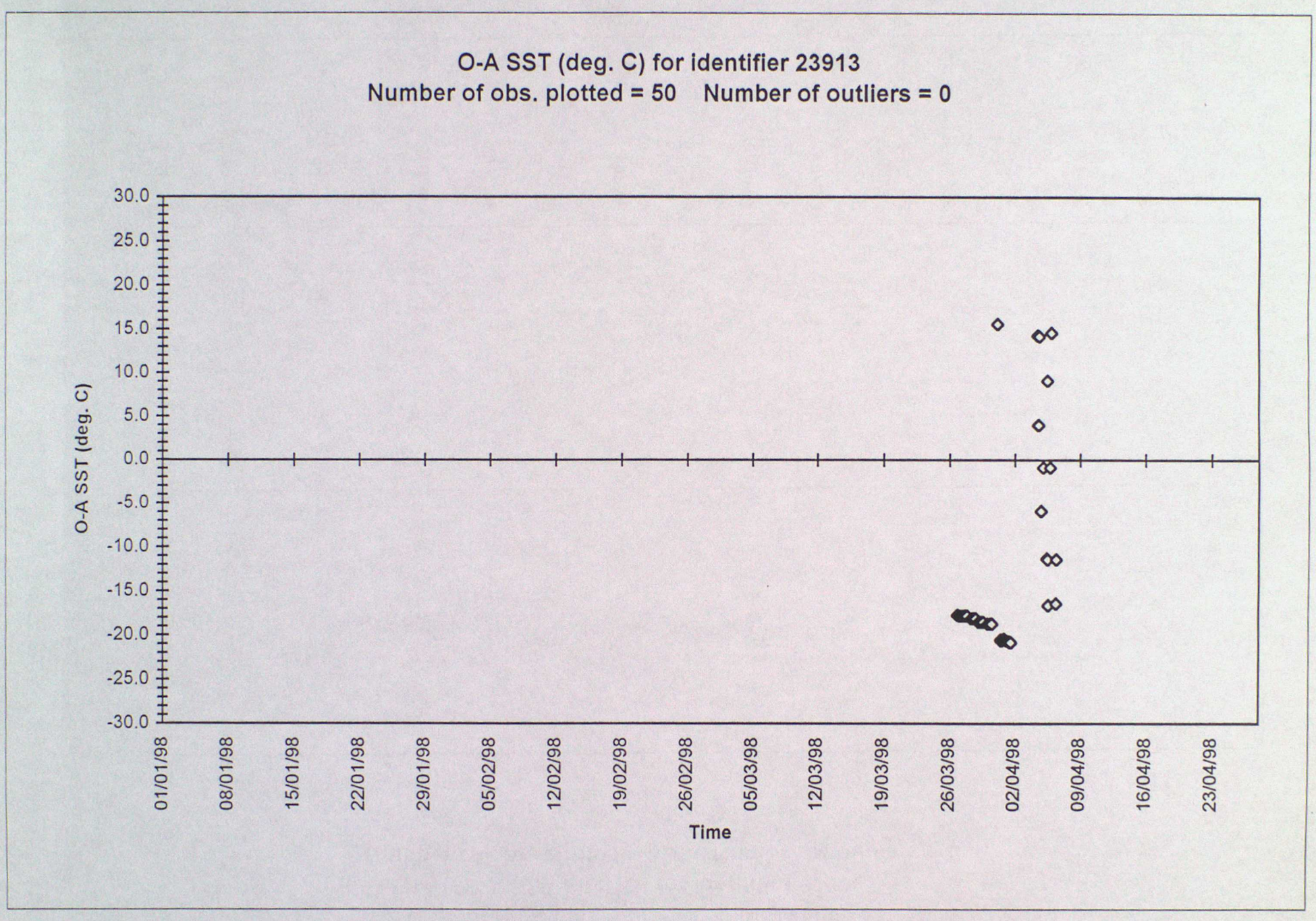
O-B wind direction (deg.) for identifier 63104
Number of obs. plotted = 1166 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

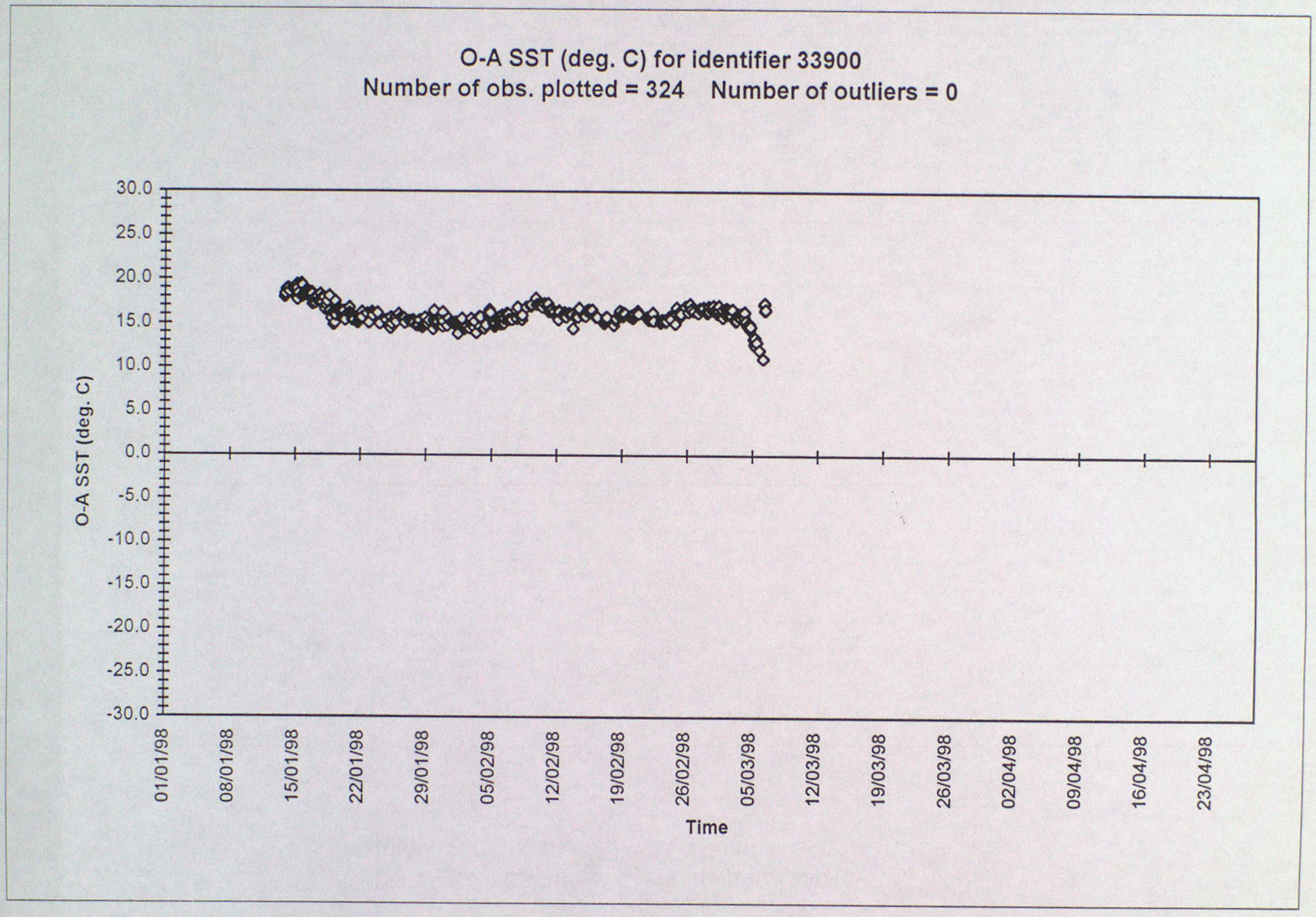
O-B wind direction (deg.) for identifier 63112
Number of obs. plotted = 225 Number of outliers = 0
O-B wind direction (deg.)
Time
01/02/98
08/02/98
15/02/98
22/02/98
01/03/98
08/03/98
15/03/98
22/03/98
29/03/98
05/04/98
12/04/98
19/04/98
26/04/98
03/05/98
10/05/98
17/05/98
24/05/98
31/05/98
07/06/98
14/06/98
21/06/98
28/06/98

O-A SST (deg. C) for identifier 21535
Number of obs. plotted = 79 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98

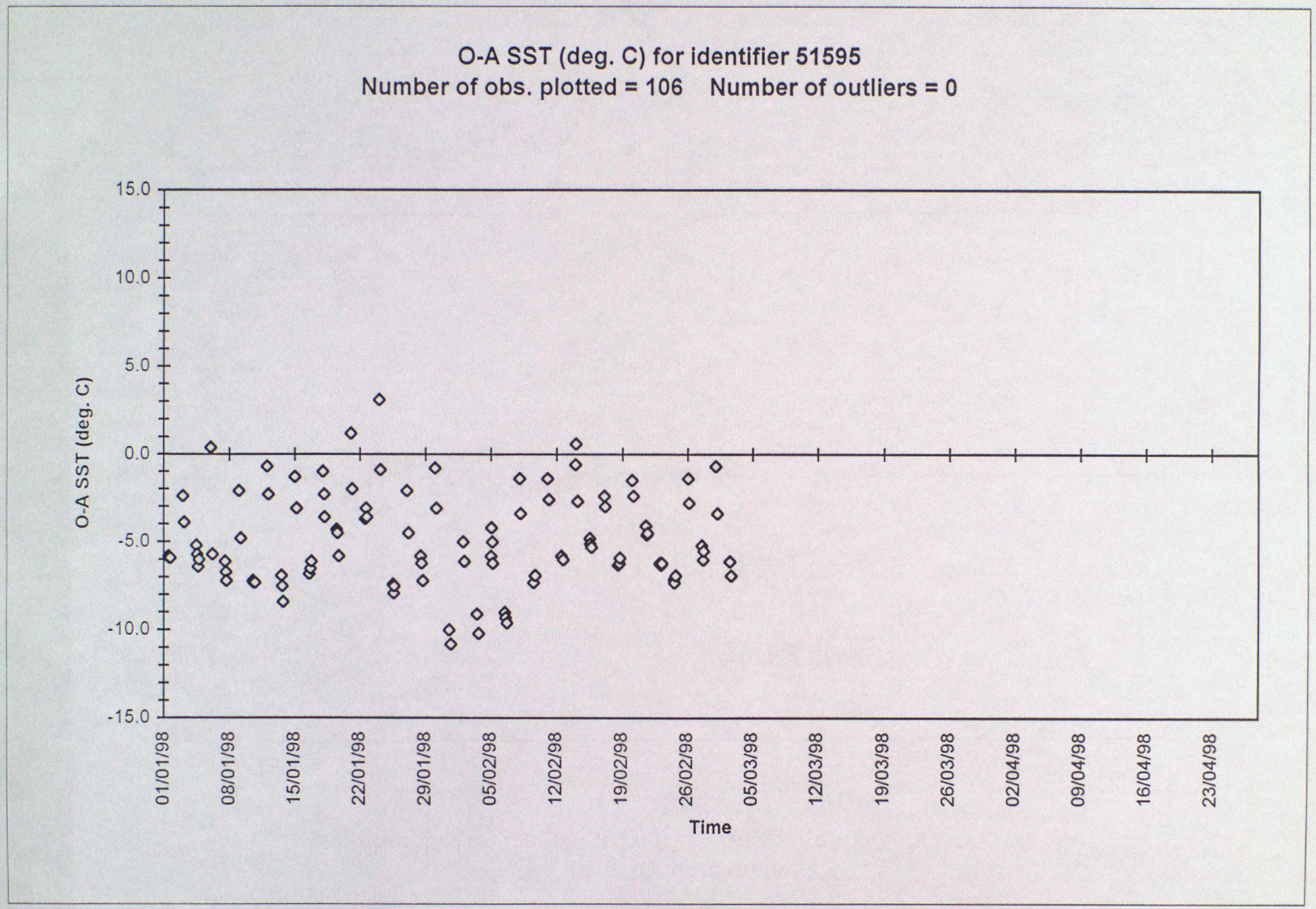

O-A SST (deg. C) for identifier 21573
Number of obs. plotted = 118 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

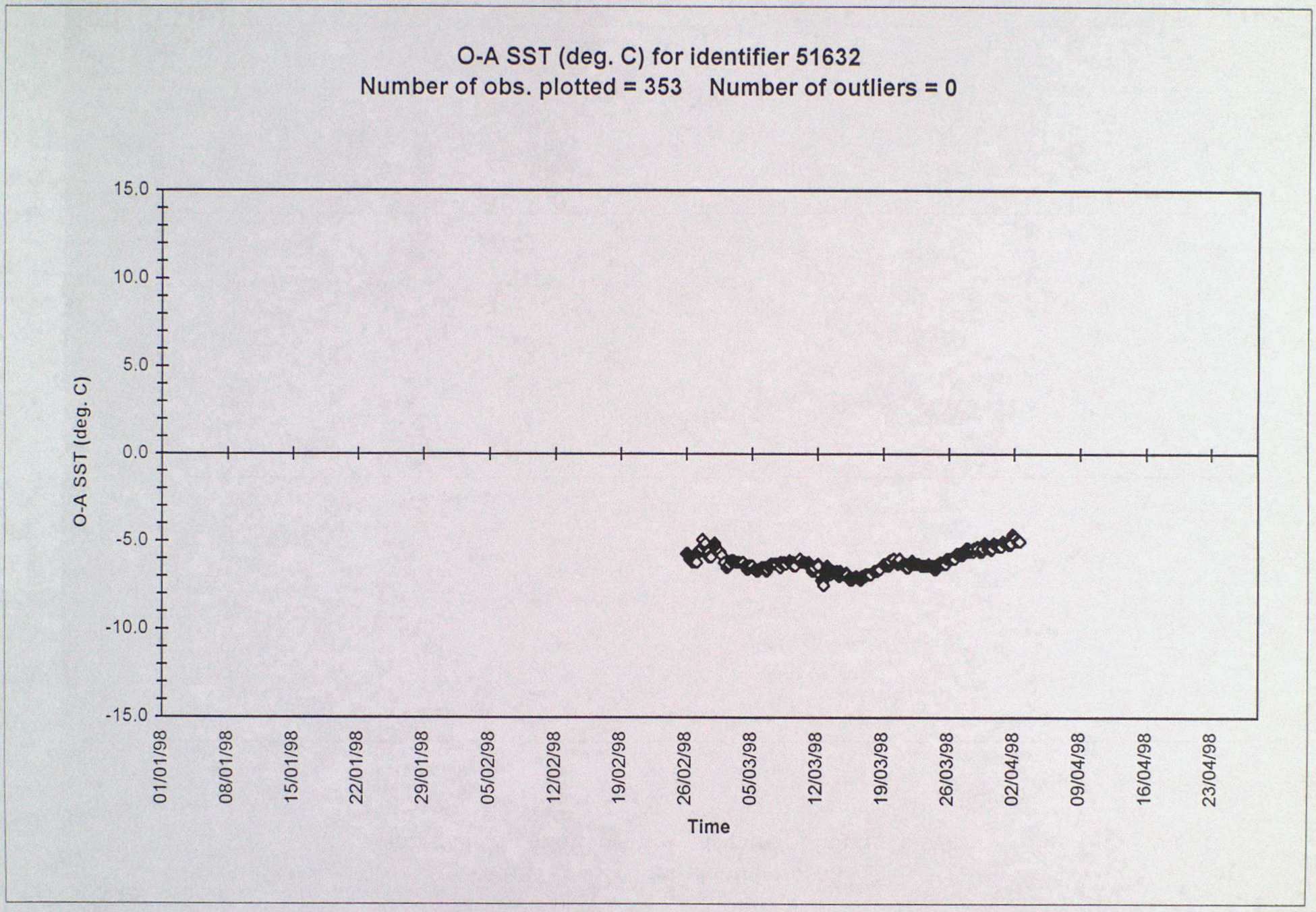

O-A SST (deg. C) for identifier 21610
Number of obs. plotted = 133 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

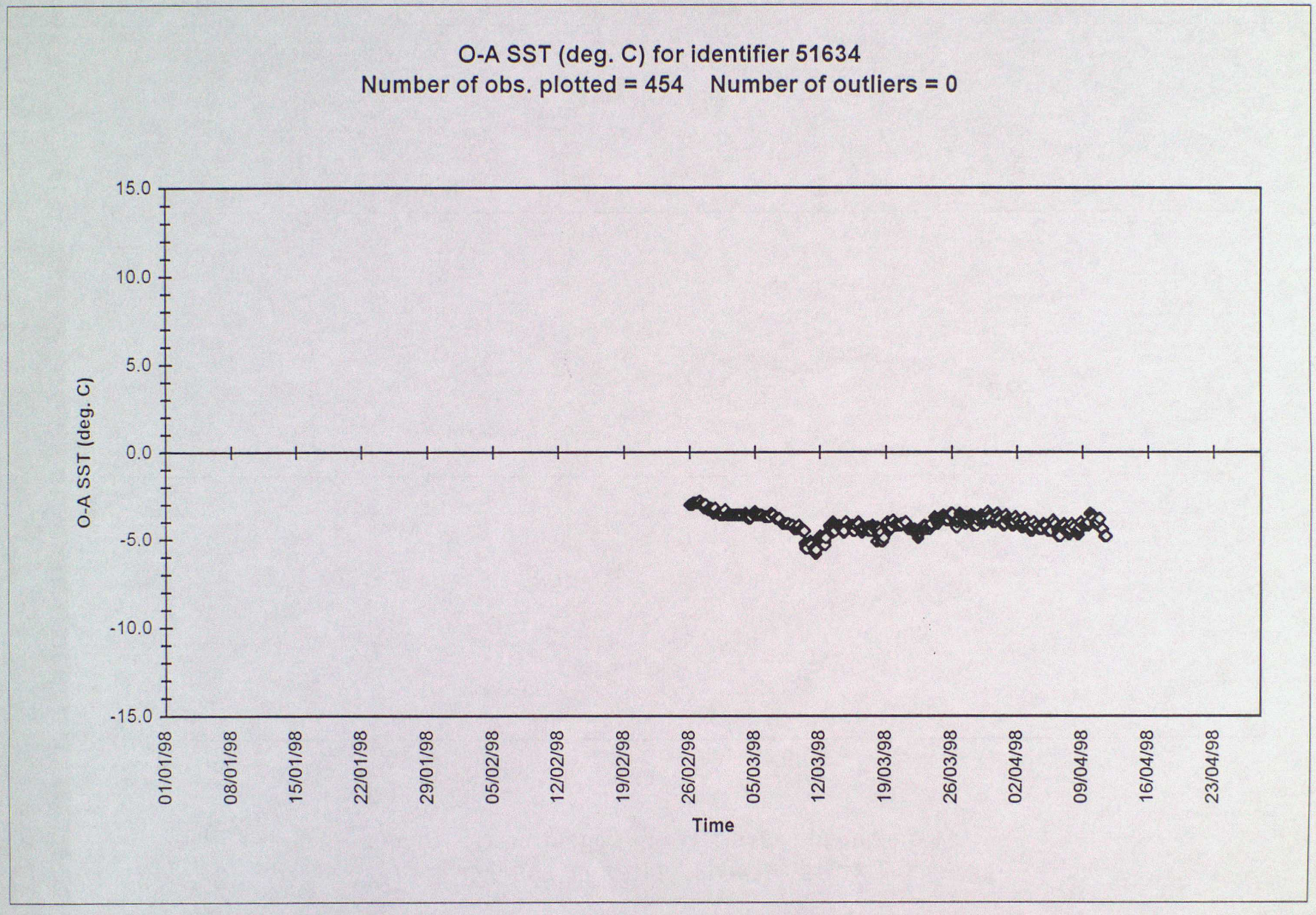

O-A SST (deg. C) for identifier 23913
Number of obs. plotted = 50 Number of outliers = 0
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

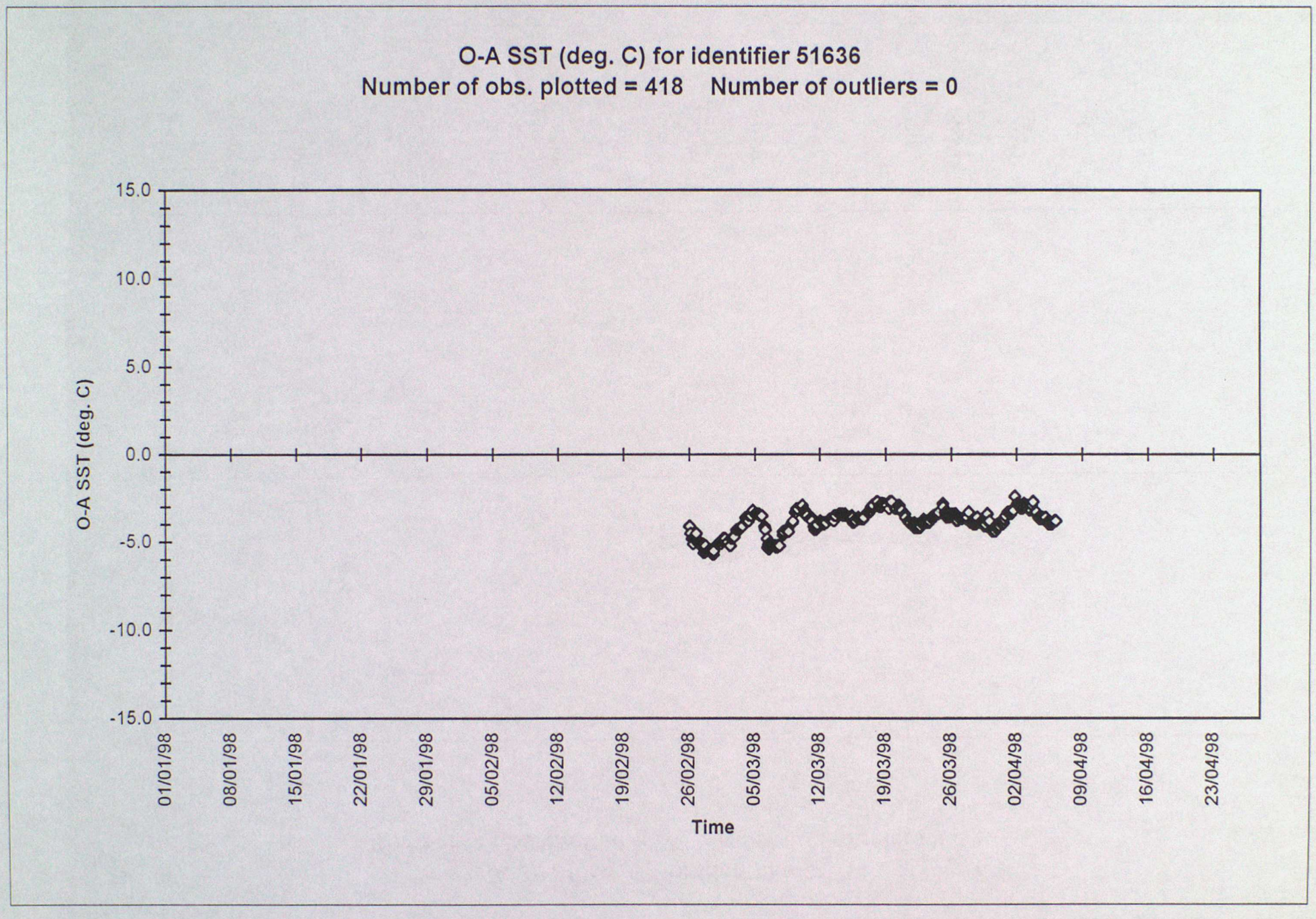

O-A SST (deg. C) for identifier 33900
Number of obs. plotted = 324 Number of outliers = 0
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

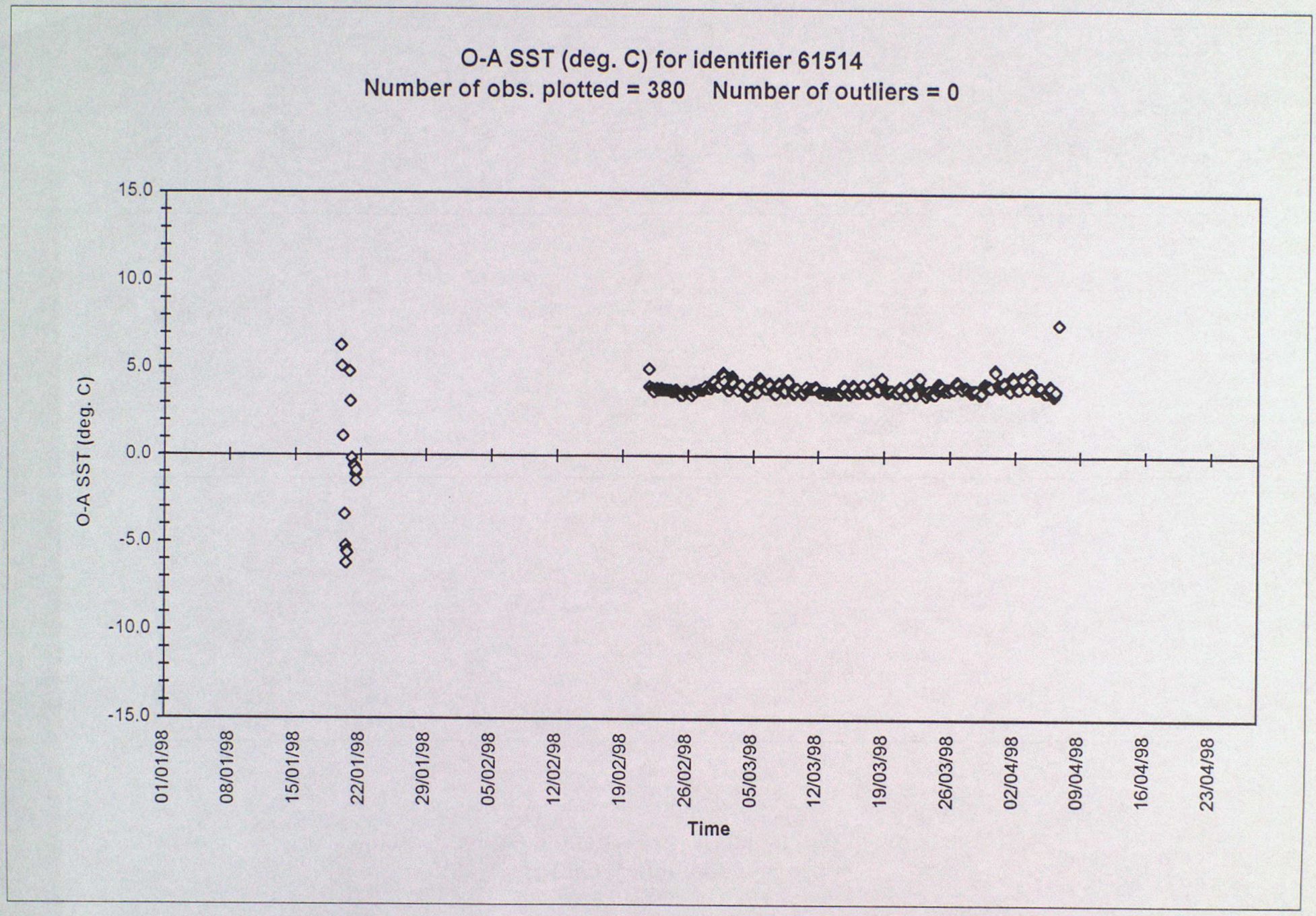
O-A SST (deg. C) for identifier 33903
Number of obs. plotted = 630 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

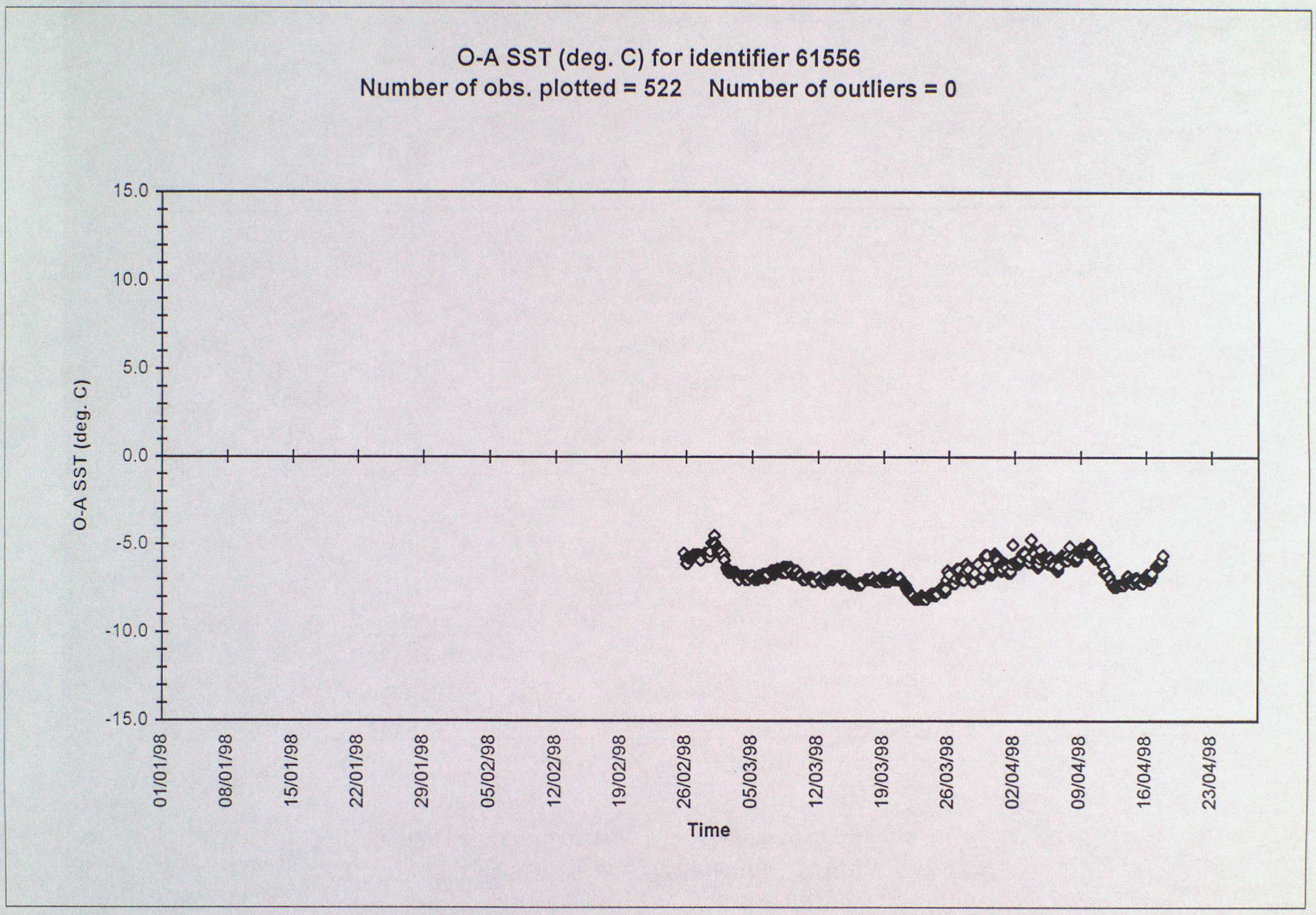

O-A SST (deg. C) for identifier 51595
Number of obs. plotted = 106 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 51632
Number of obs. plotted = 353 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

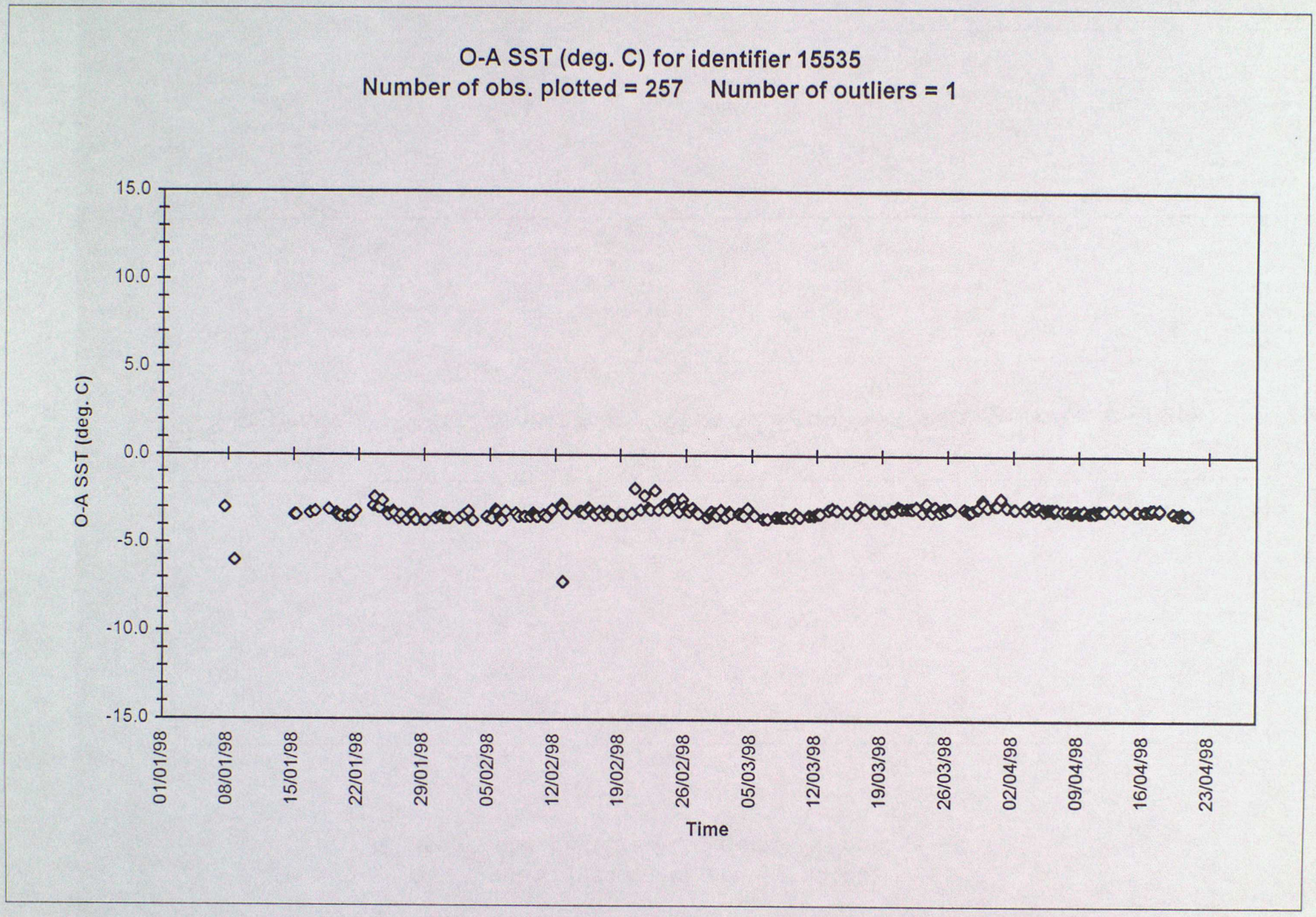

O-A SST (deg. C) for identifier 51634
Number of obs. plotted = 454 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

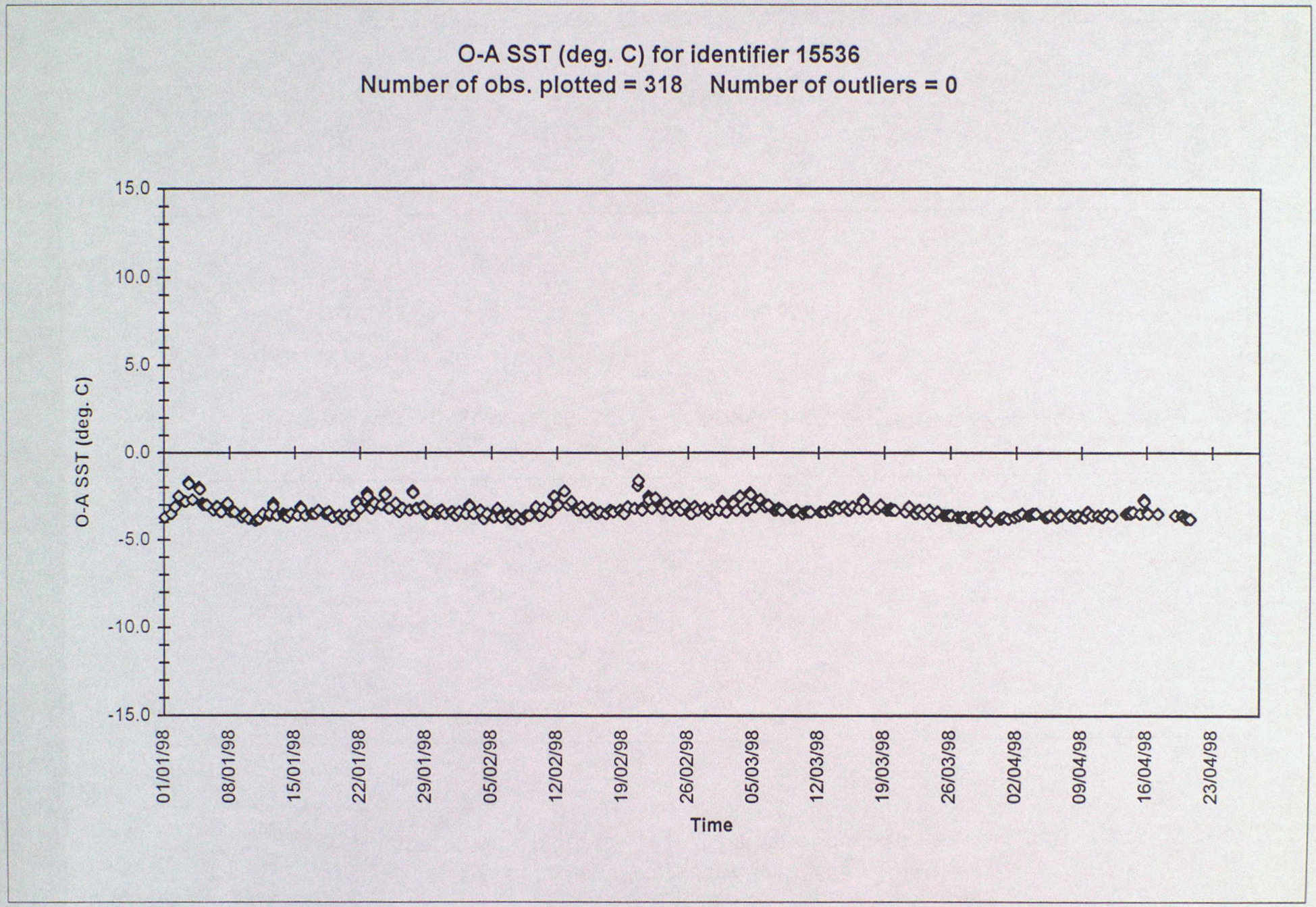

O-A SST (deg. C) for identifier 51636
Number of obs. plotted = 418 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

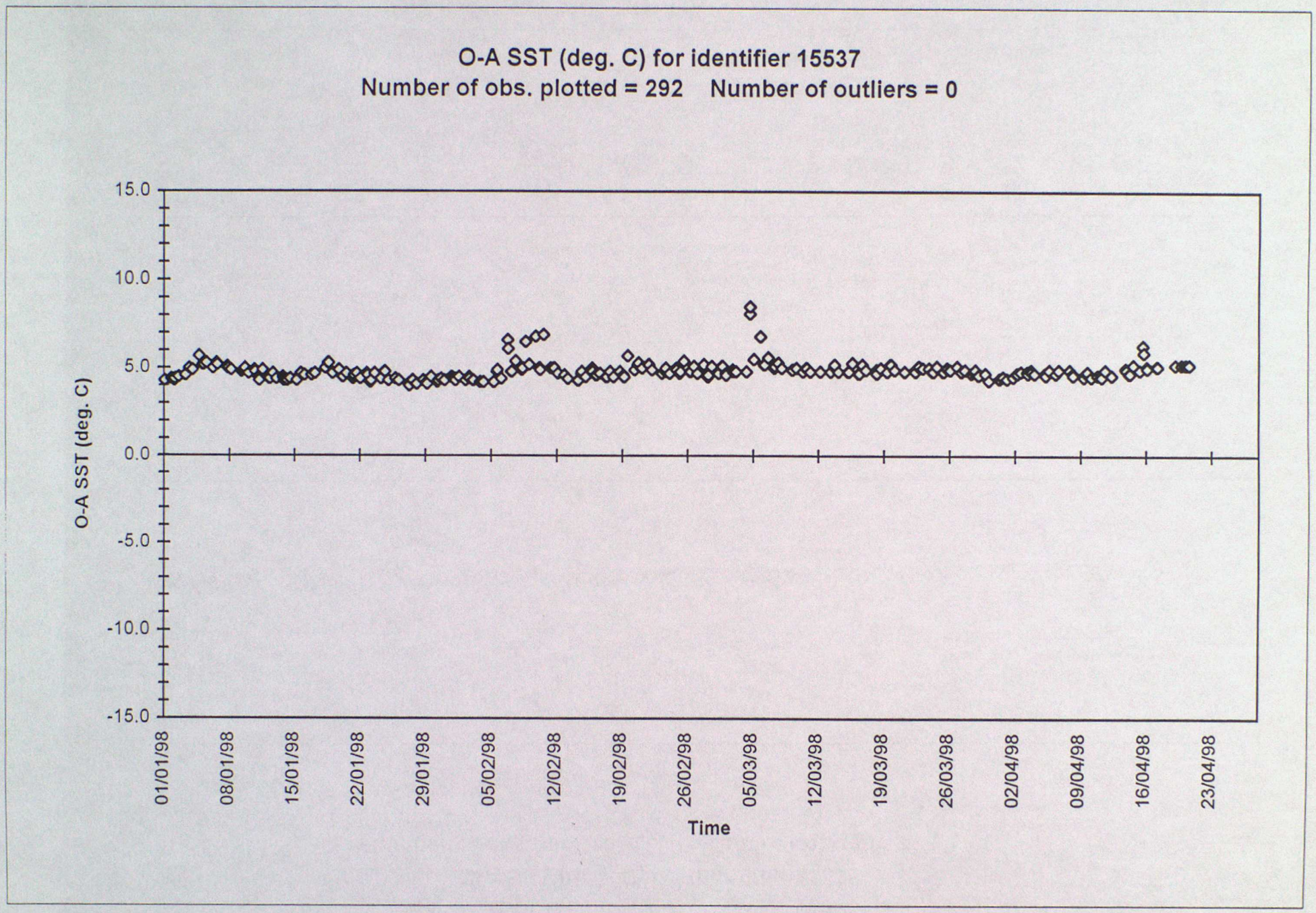

O-A SST (deg. C) for identifier 61514
Number of obs. plotted = 380 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

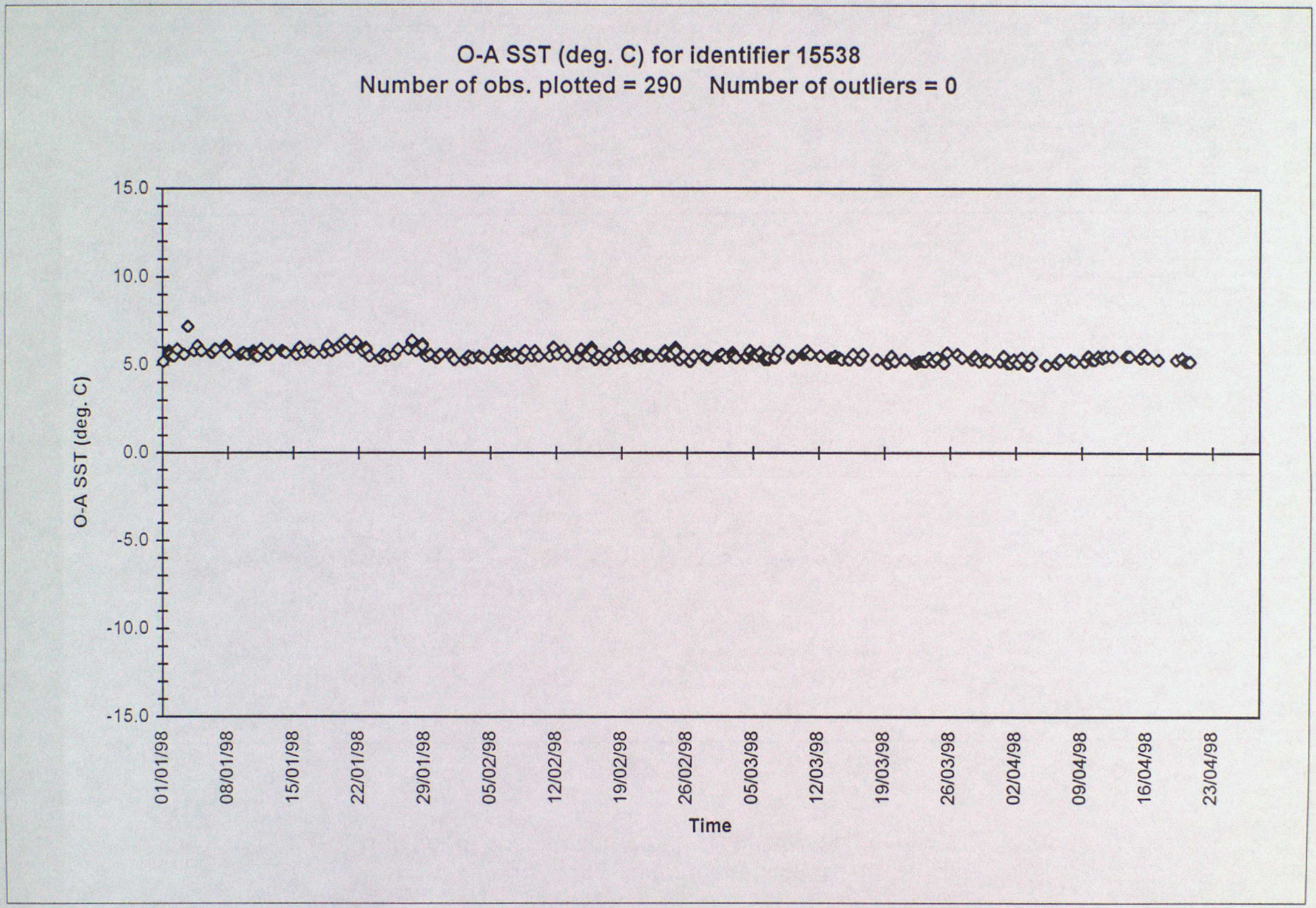

O-A SST (deg. C) for identifier 61556
Number of obs. plotted = 522 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

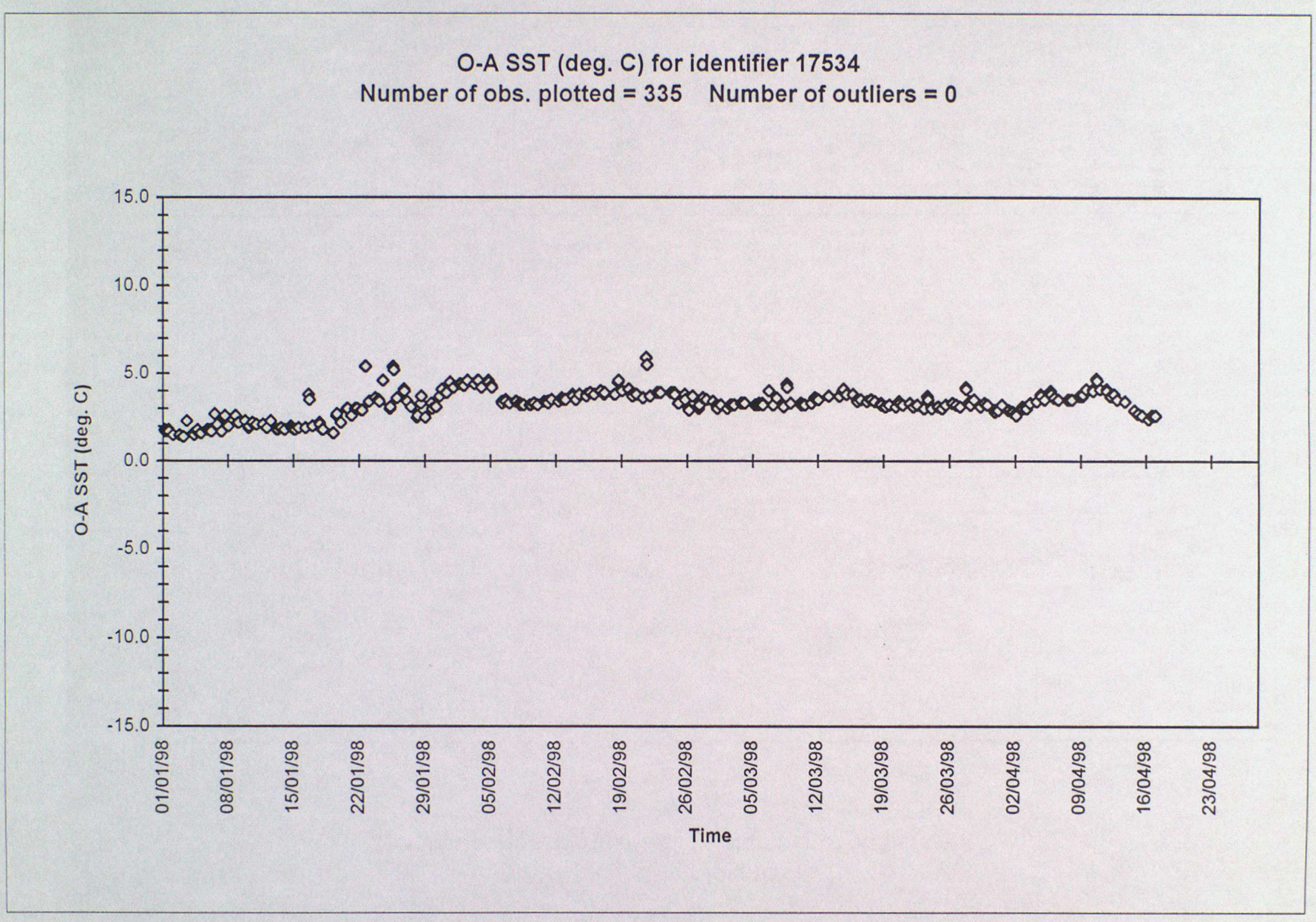
O-A SST (deg. C) for identifier 61579
Number of obs. plotted = 116 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

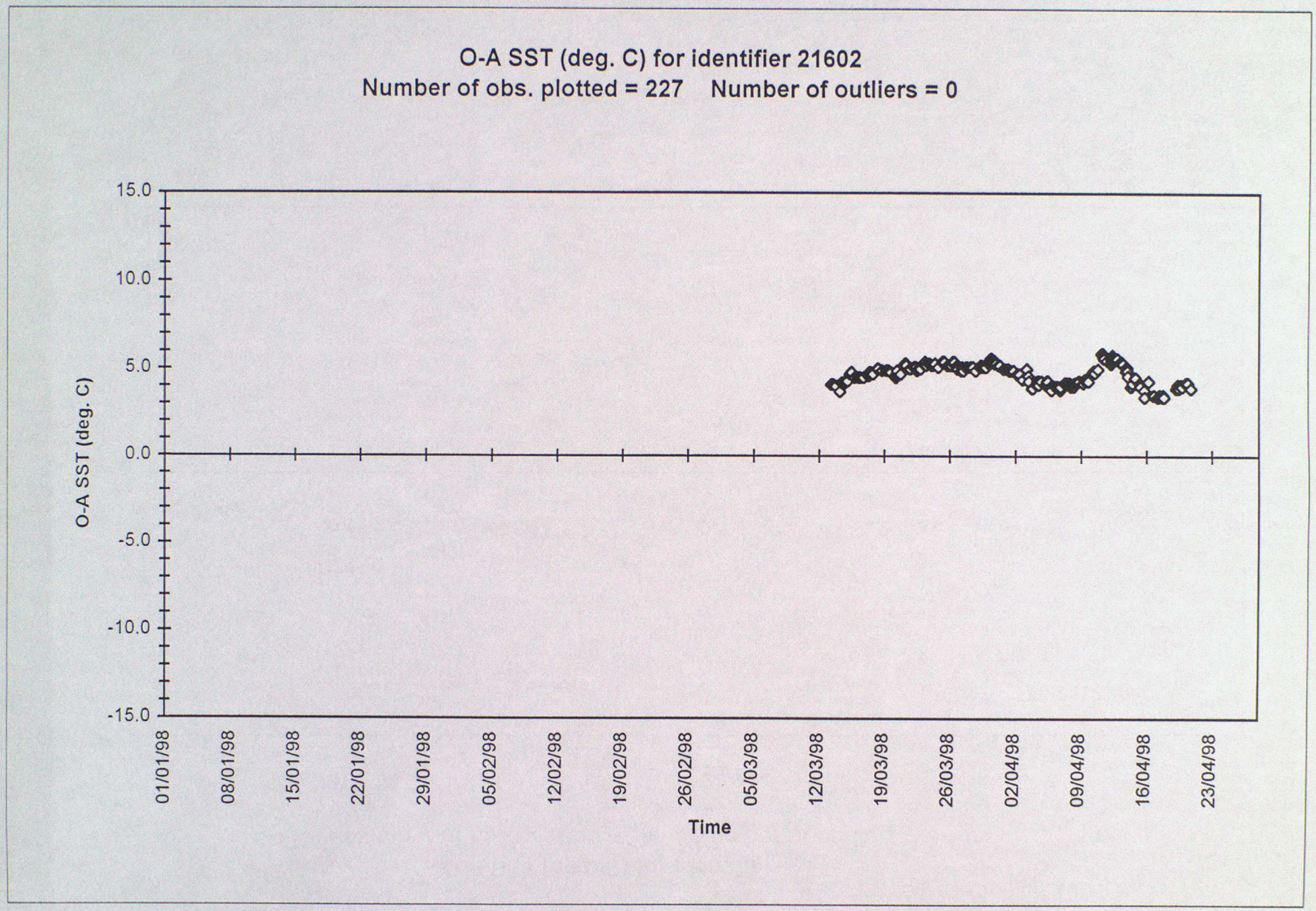

O-A SST (deg. C) for identifier 15535
Number of obs. plotted = 257 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

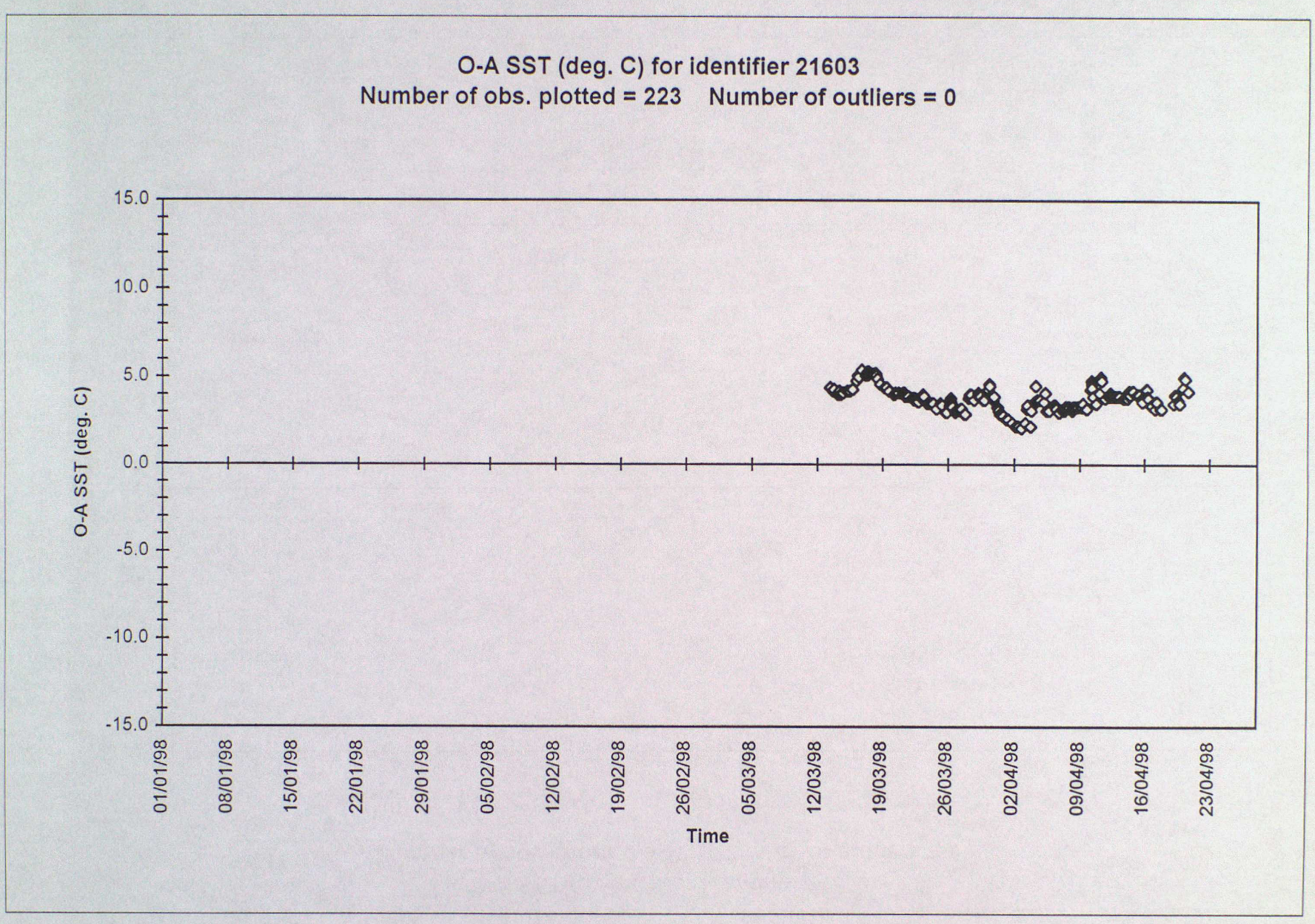

O-A SST (deg. C) for identifier 15536
Number of obs. plotted = 318 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

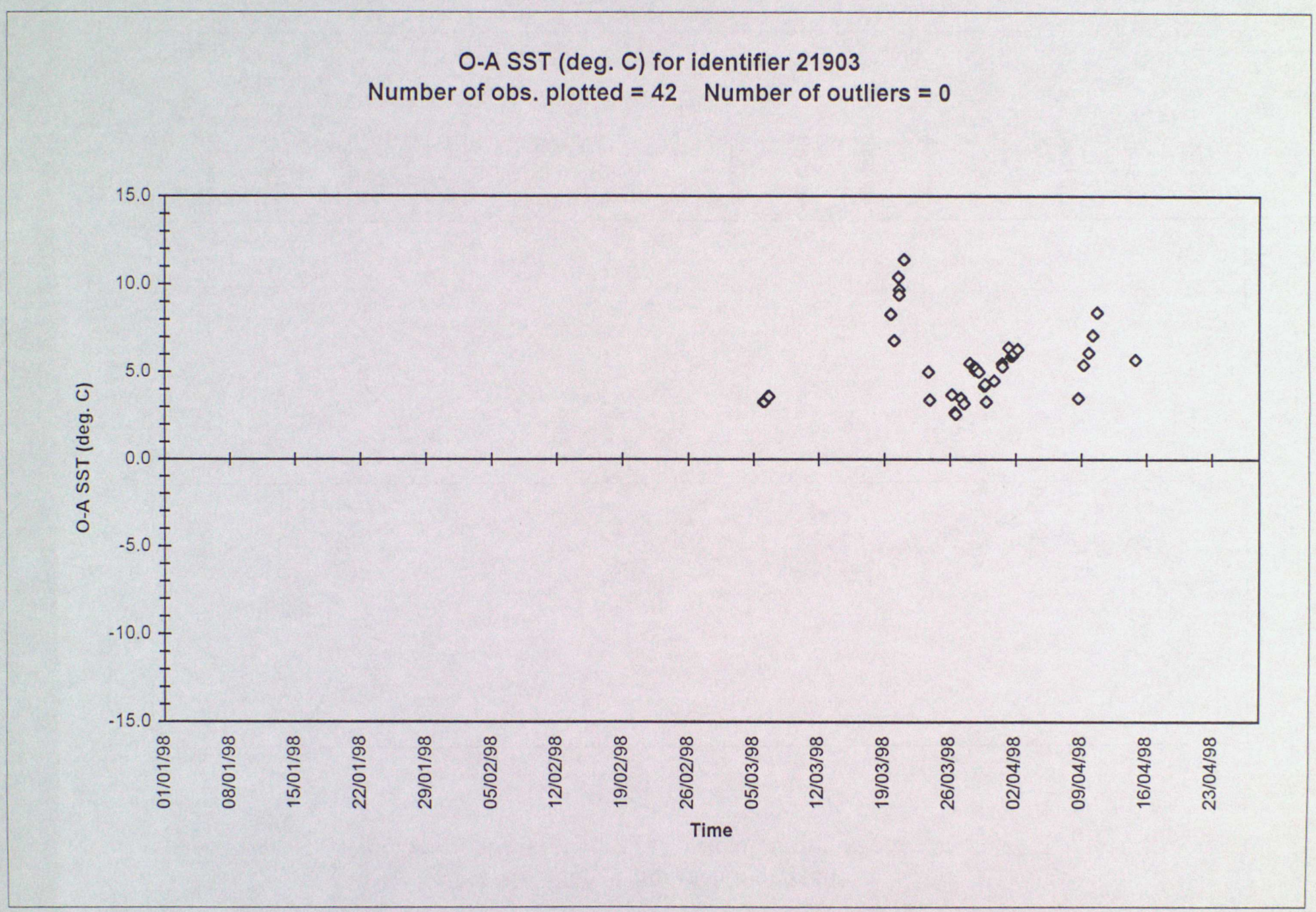

O-A SST (deg. C) for identifier 15537
Number of obs. plotted = 292 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

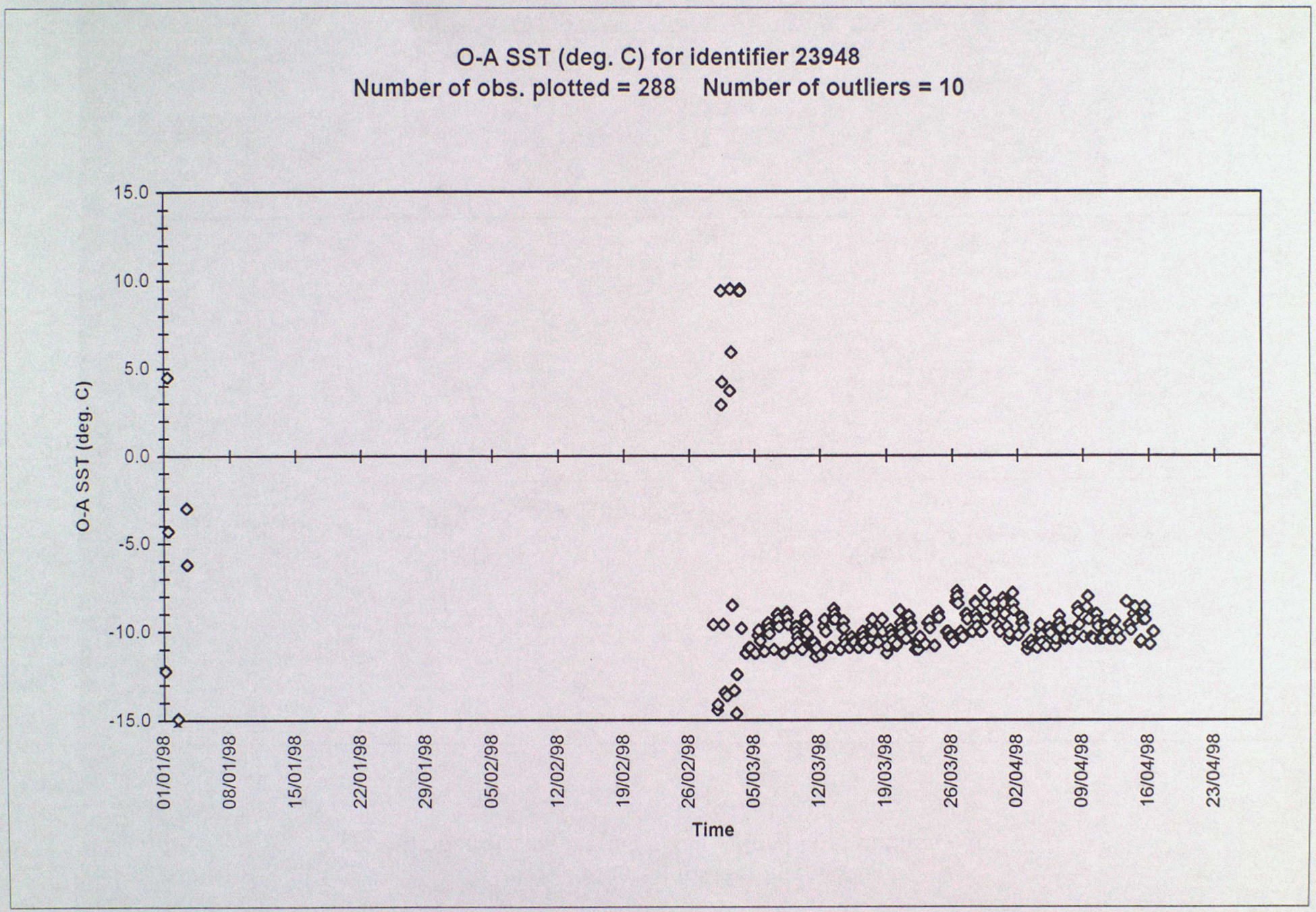

O-A SST (deg. C) for identifier 15538
Number of obs. plotted = 290 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

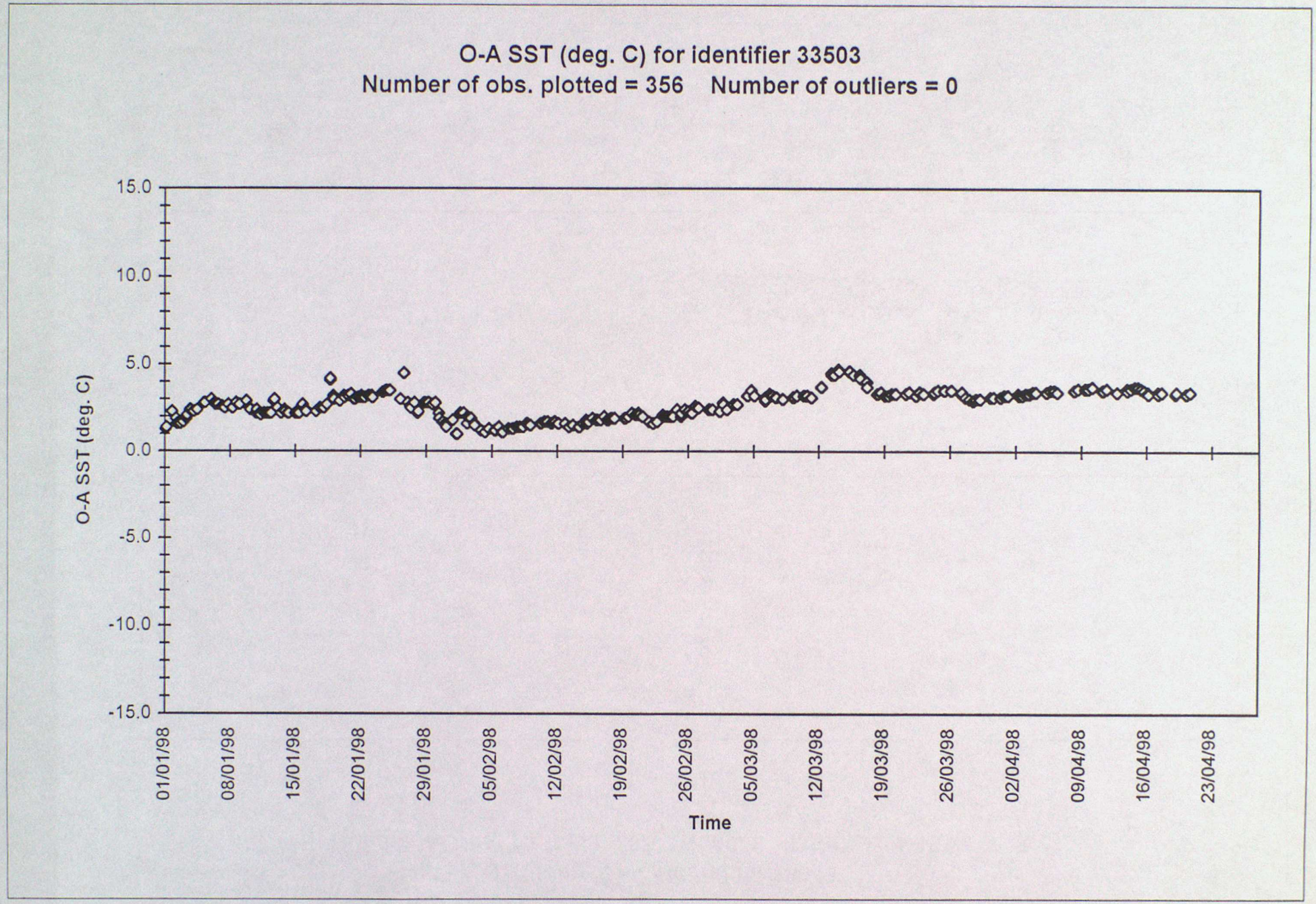

O-A SST (deg. C) for identifier 17534
Number of obs. plotted = 335 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

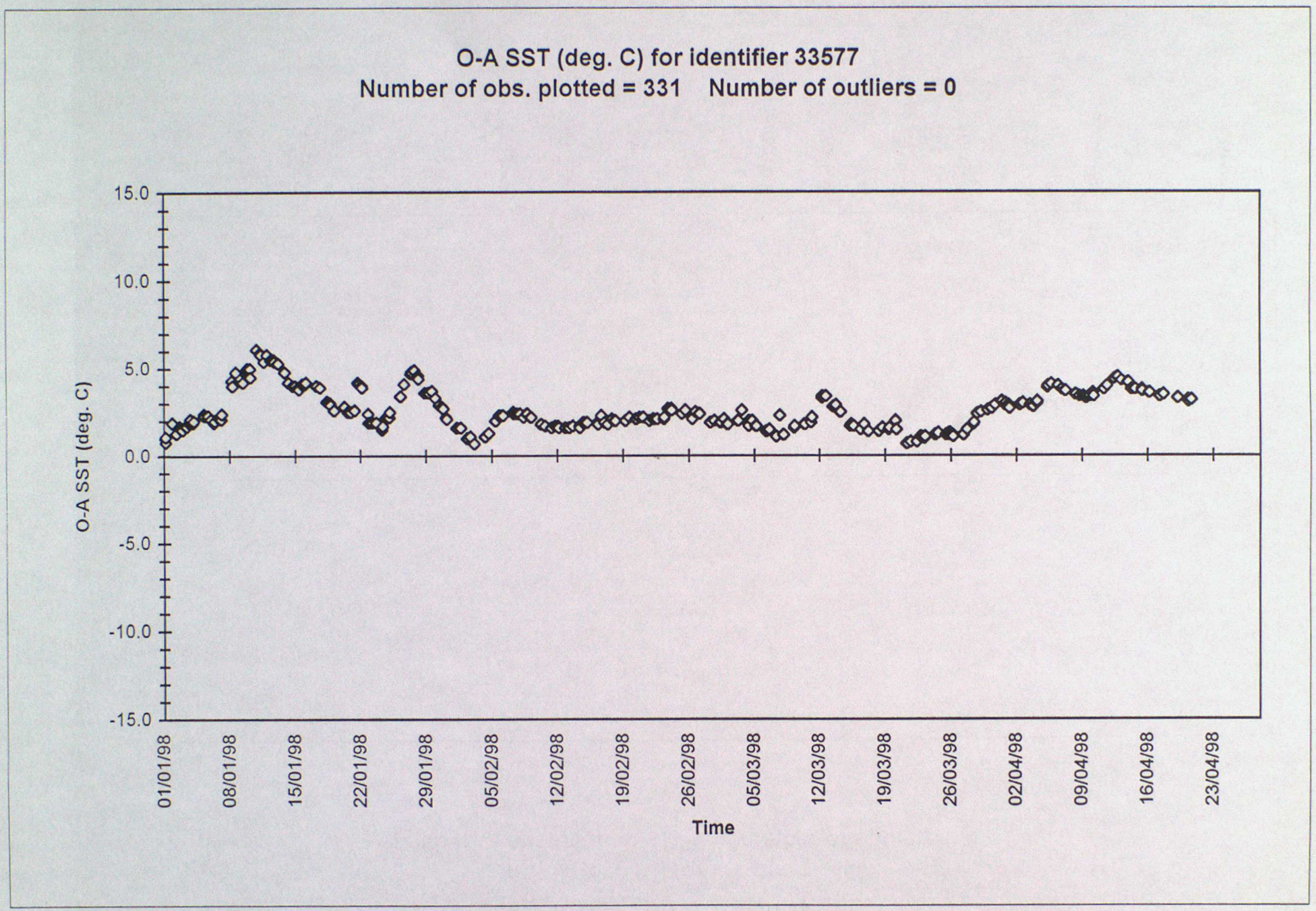

O-A SST (deg. C) for identifier 21602
Number of obs. plotted = 227 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

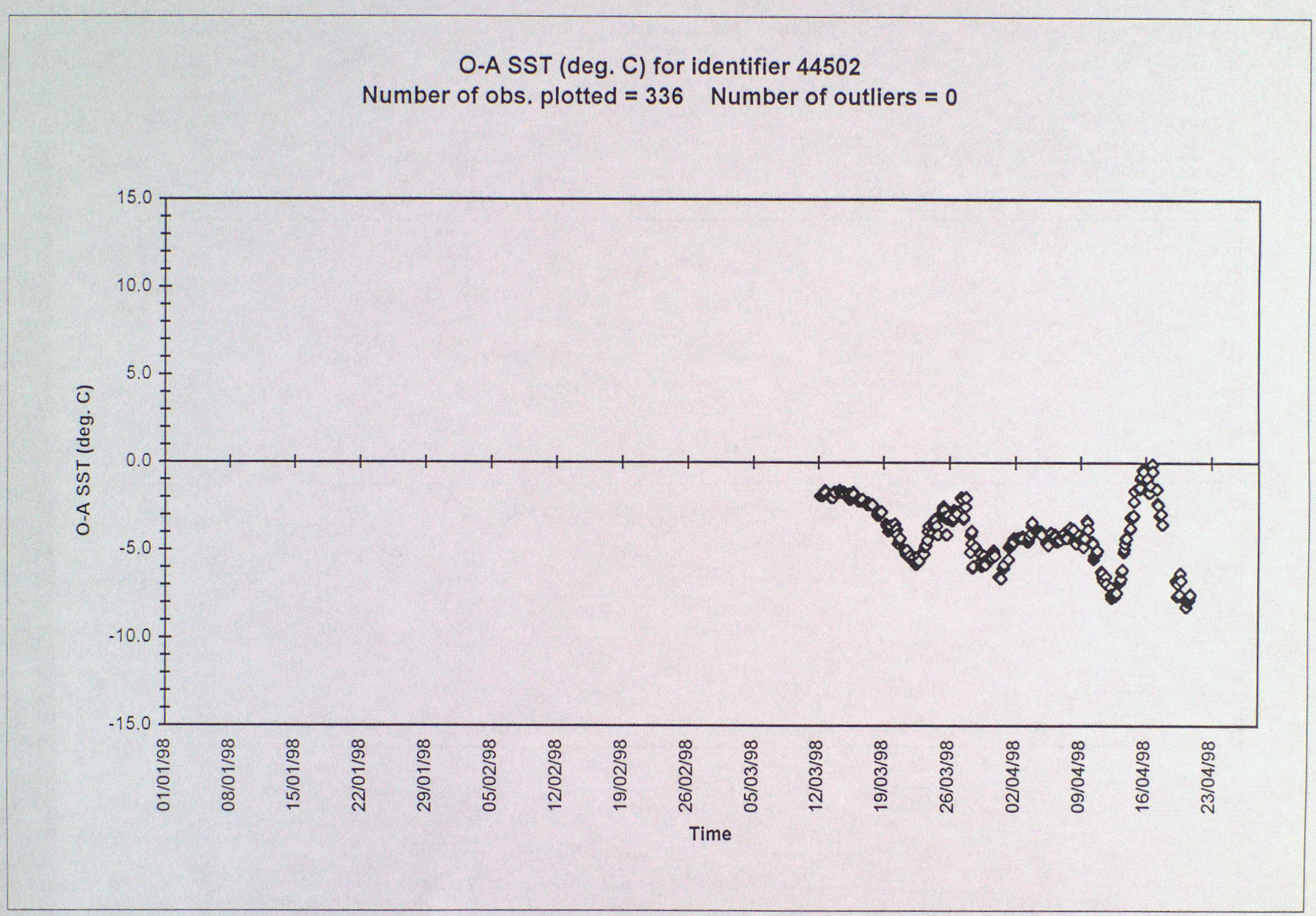

O-A SST (deg. C) for identifier 21603
Number of obs. plotted = 223 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 21903
Number of obs. plotted = 42 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

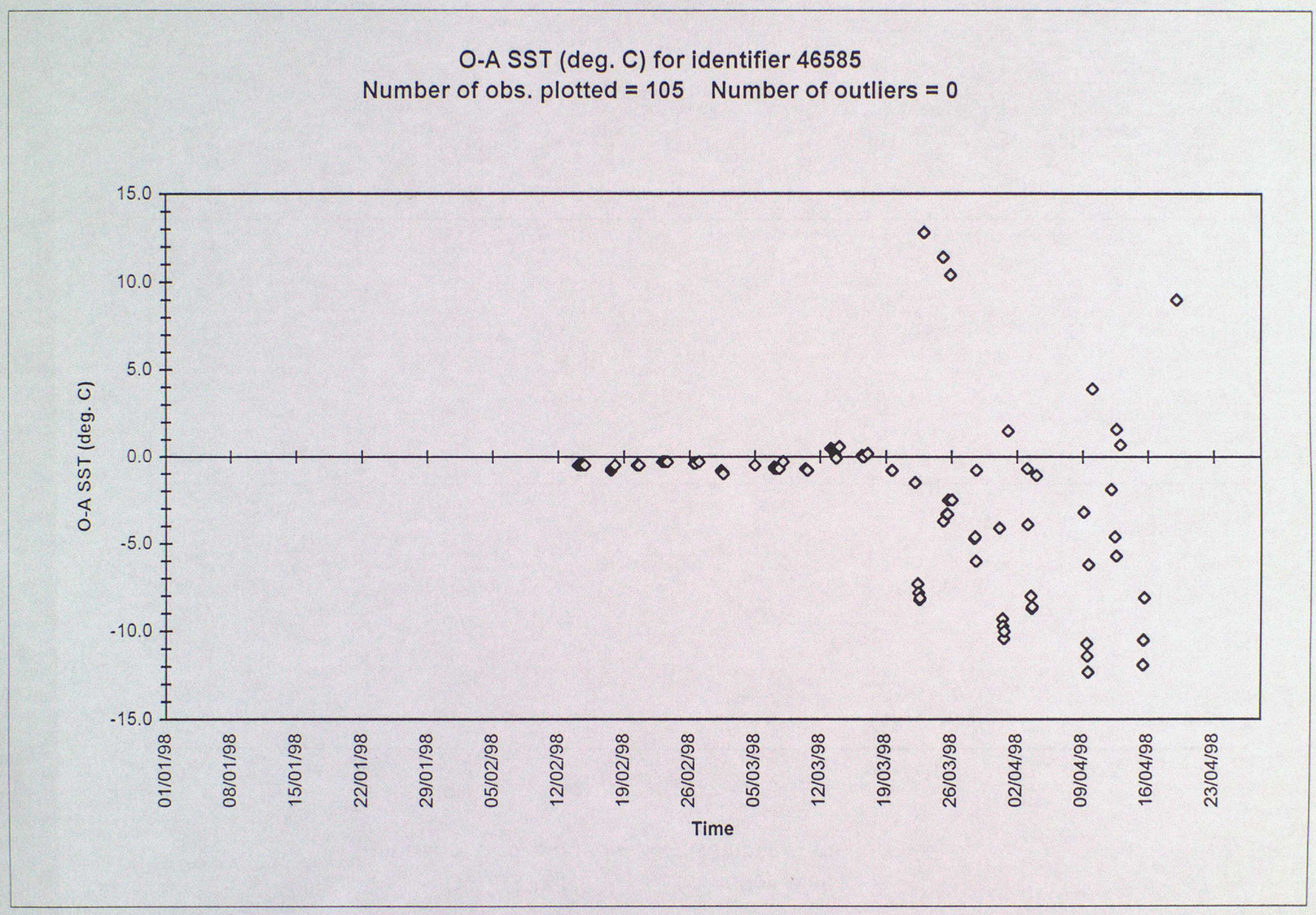

O-A SST (deg. C) for identifier 23948
Number of obs. plotted = 288 Number of outliers = 10
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

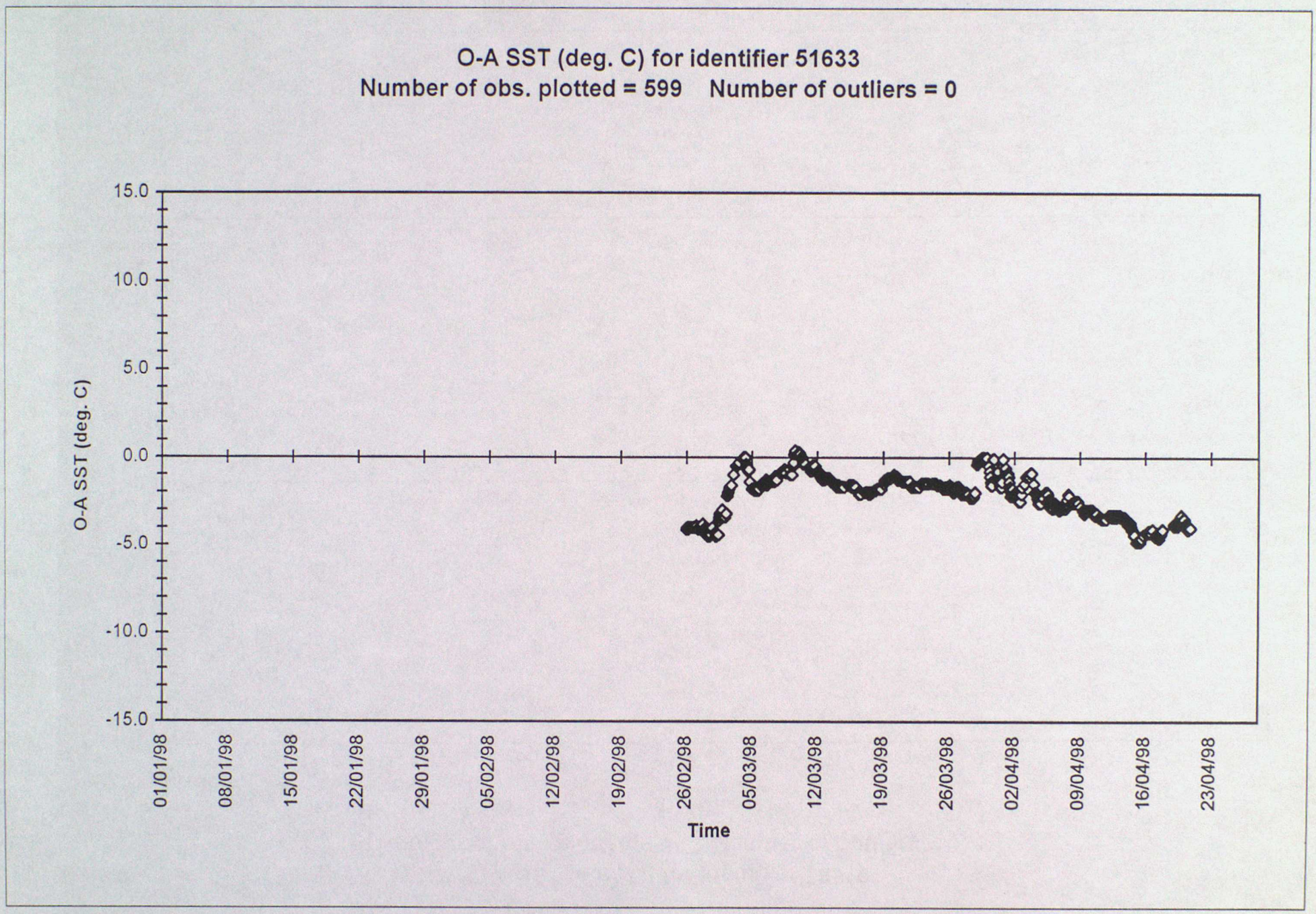

O-A SST (deg. C) for identifier 33503
Number of obs. plotted = 356 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 33577
Number of obs. plotted = 331 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

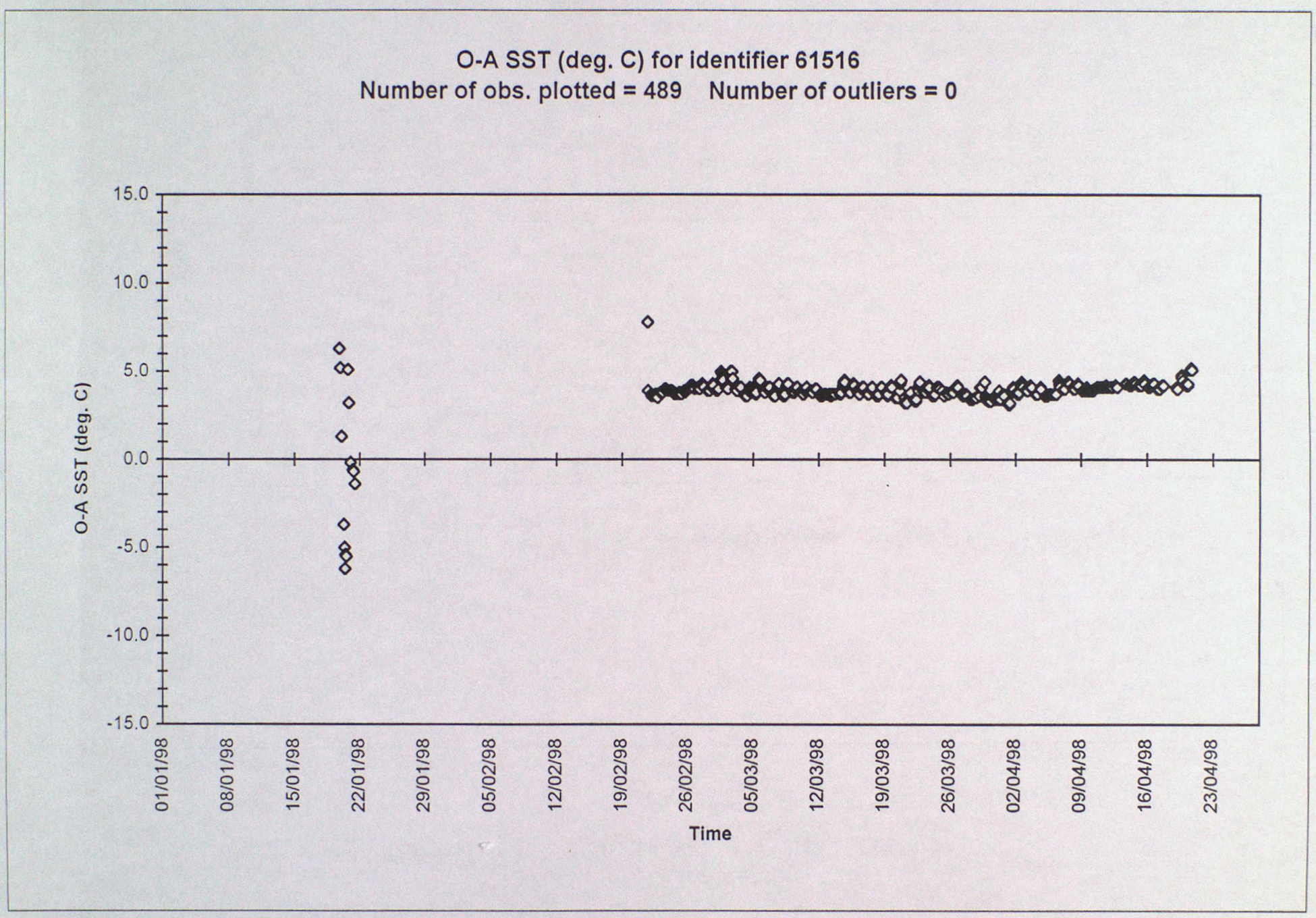

O-A SST (deg. C) for identifier 44502
Number of obs. plotted = 336 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

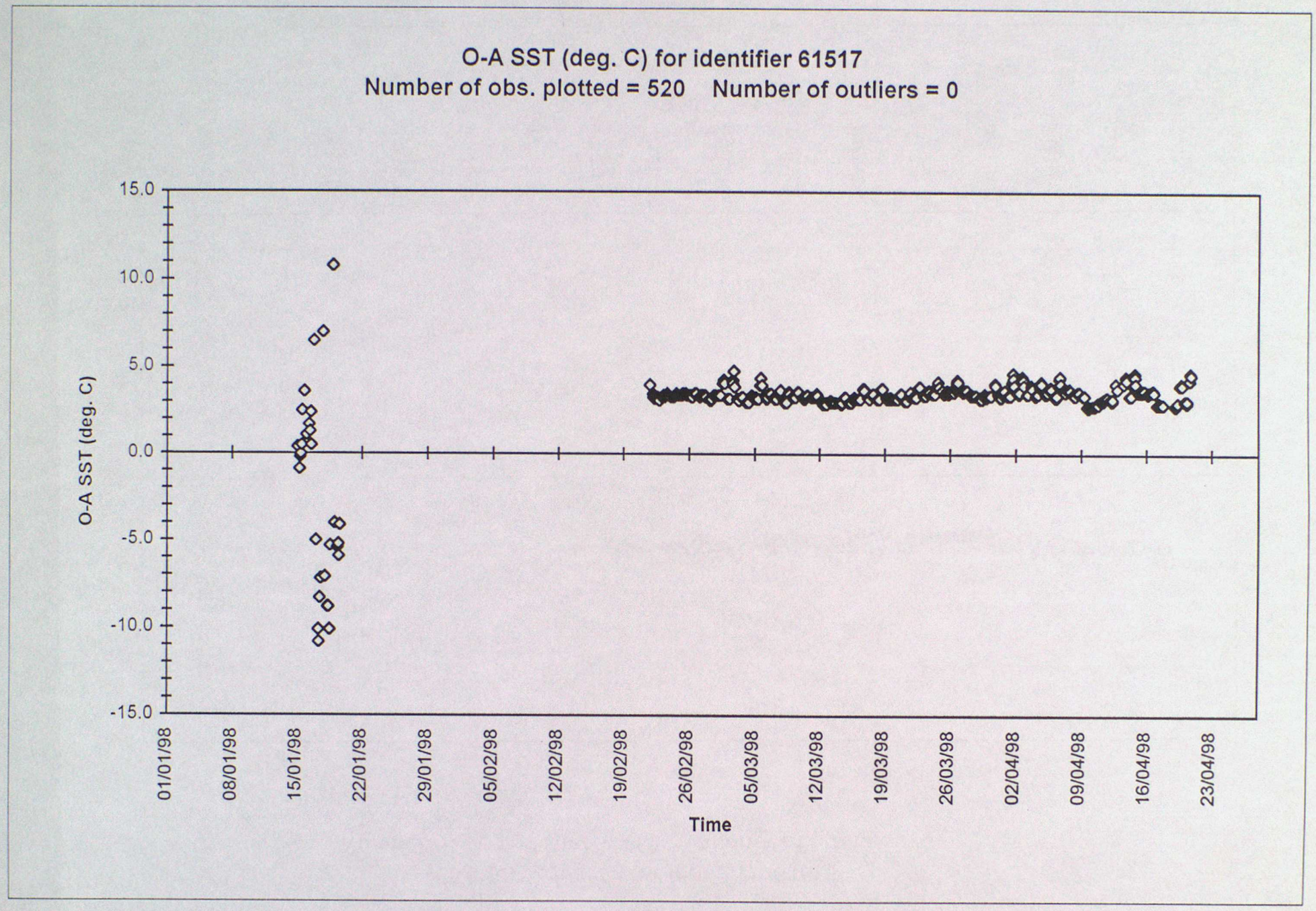
O-A SST (deg. C) for identifier 44601
Number of obs. plotted = 53 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

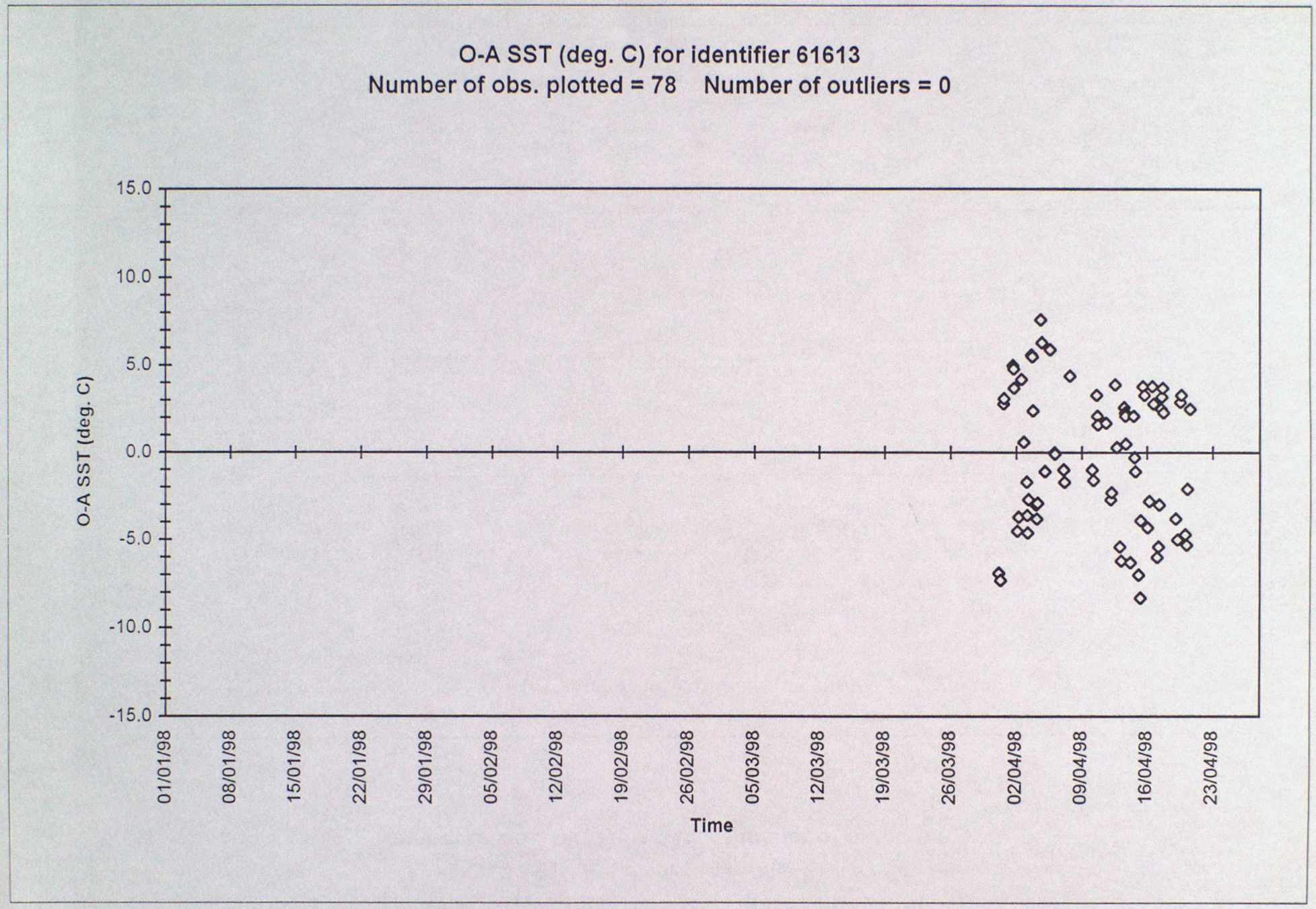

O-A SST (deg. C) for identifier 46585
Number of obs. plotted = 105 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 51633
Number of obs. plotted = 599 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier 53516
Number of obs. plotted = 84 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

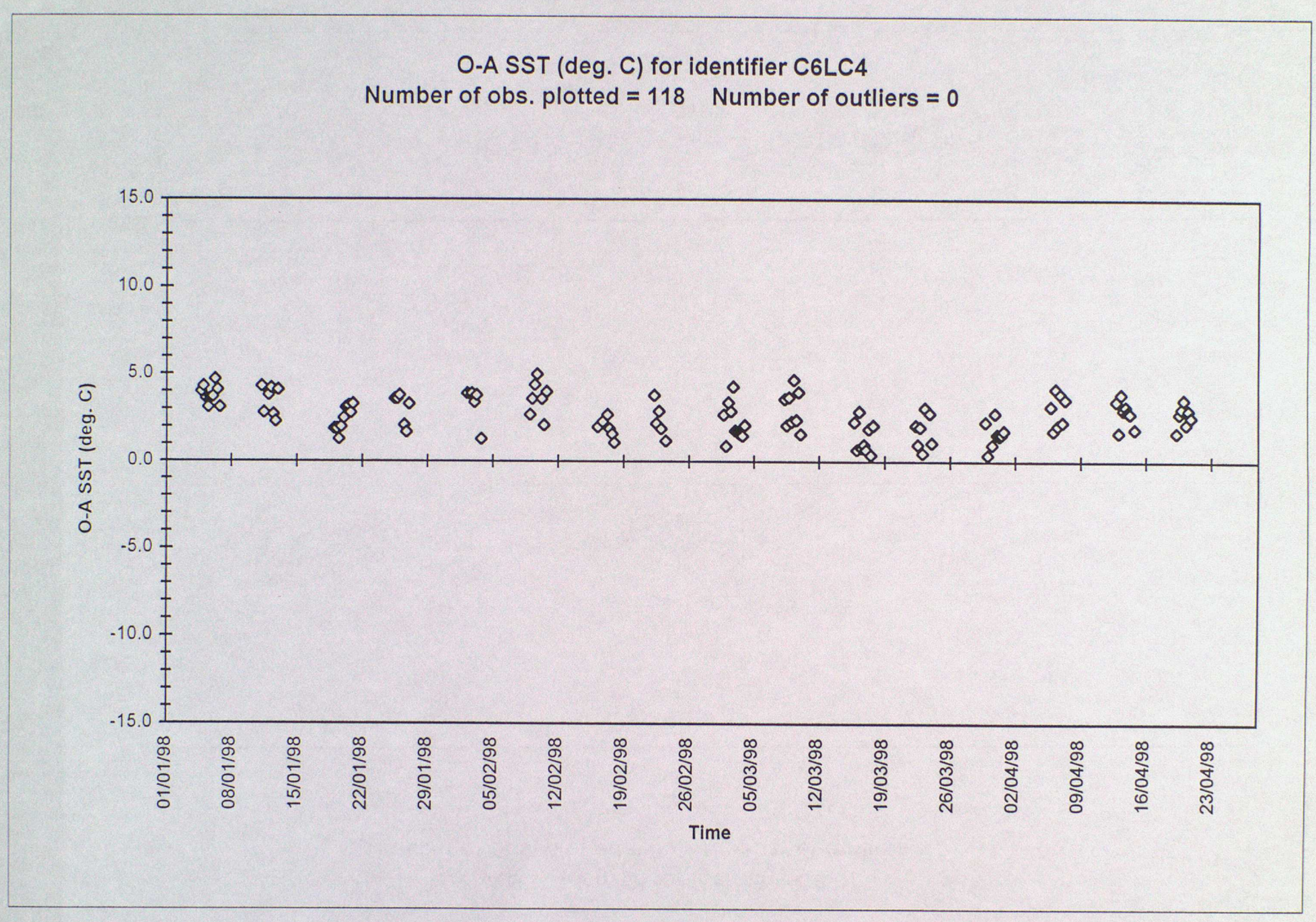

O-A SST (deg. C) for identifier 61516
Number of obs. plotted = 489 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

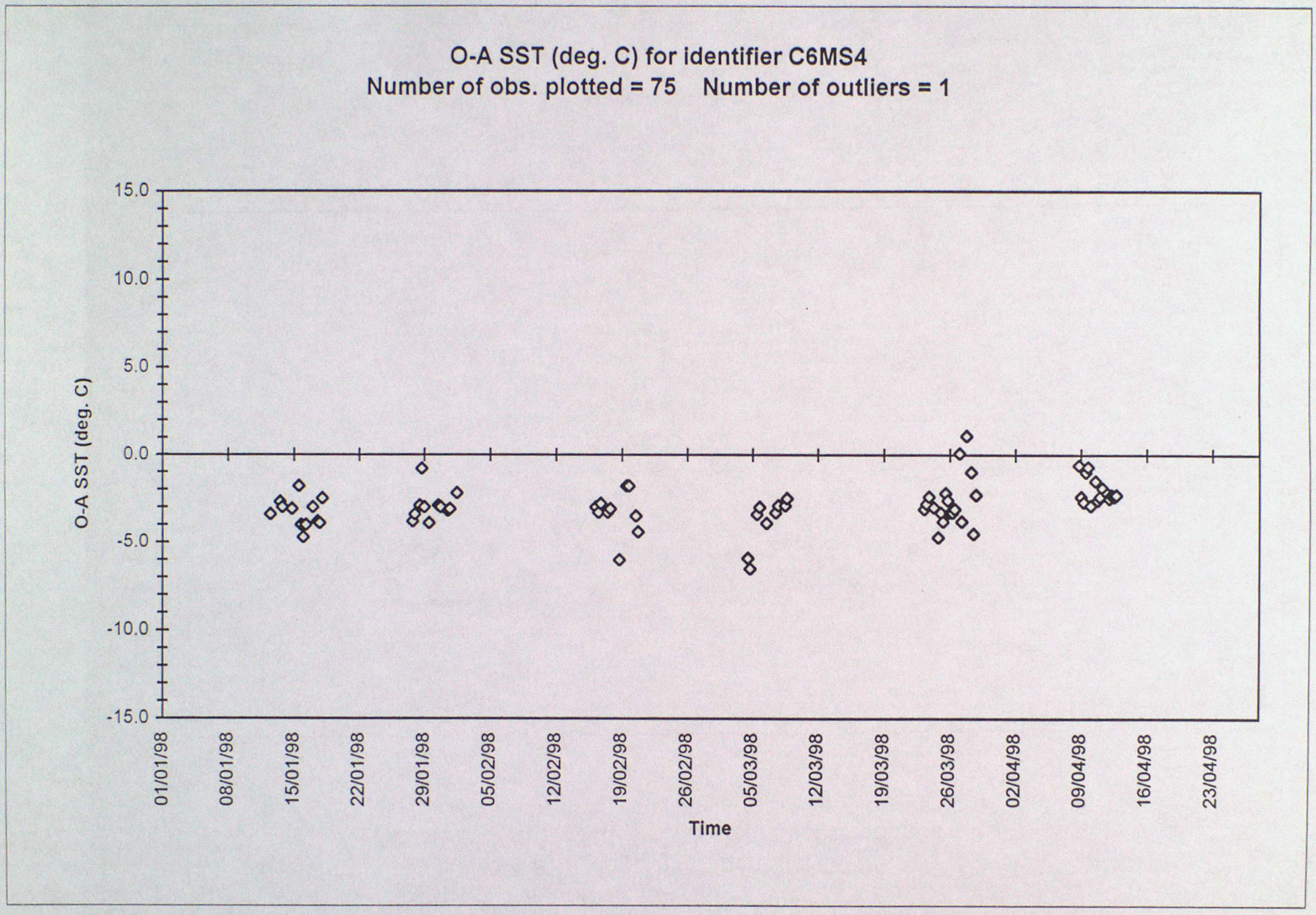

O-A SST (deg. C) for identifier 61517
Number of obs. plotted = 520 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 61613
Number of obs. plotted = 78 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

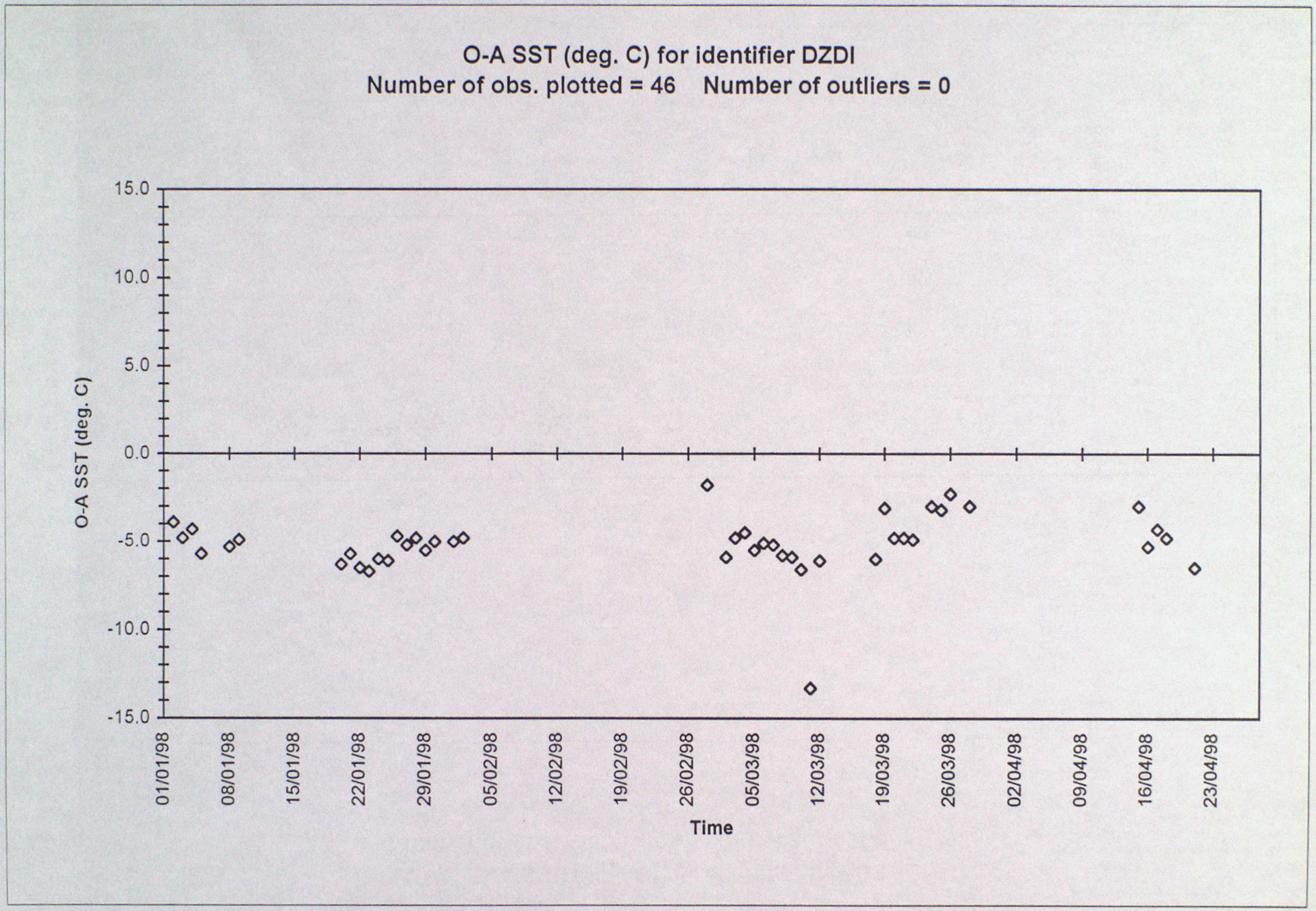
O-A SST (deg. C) for identifier C6FA7
Number of obs. plotted = 115 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

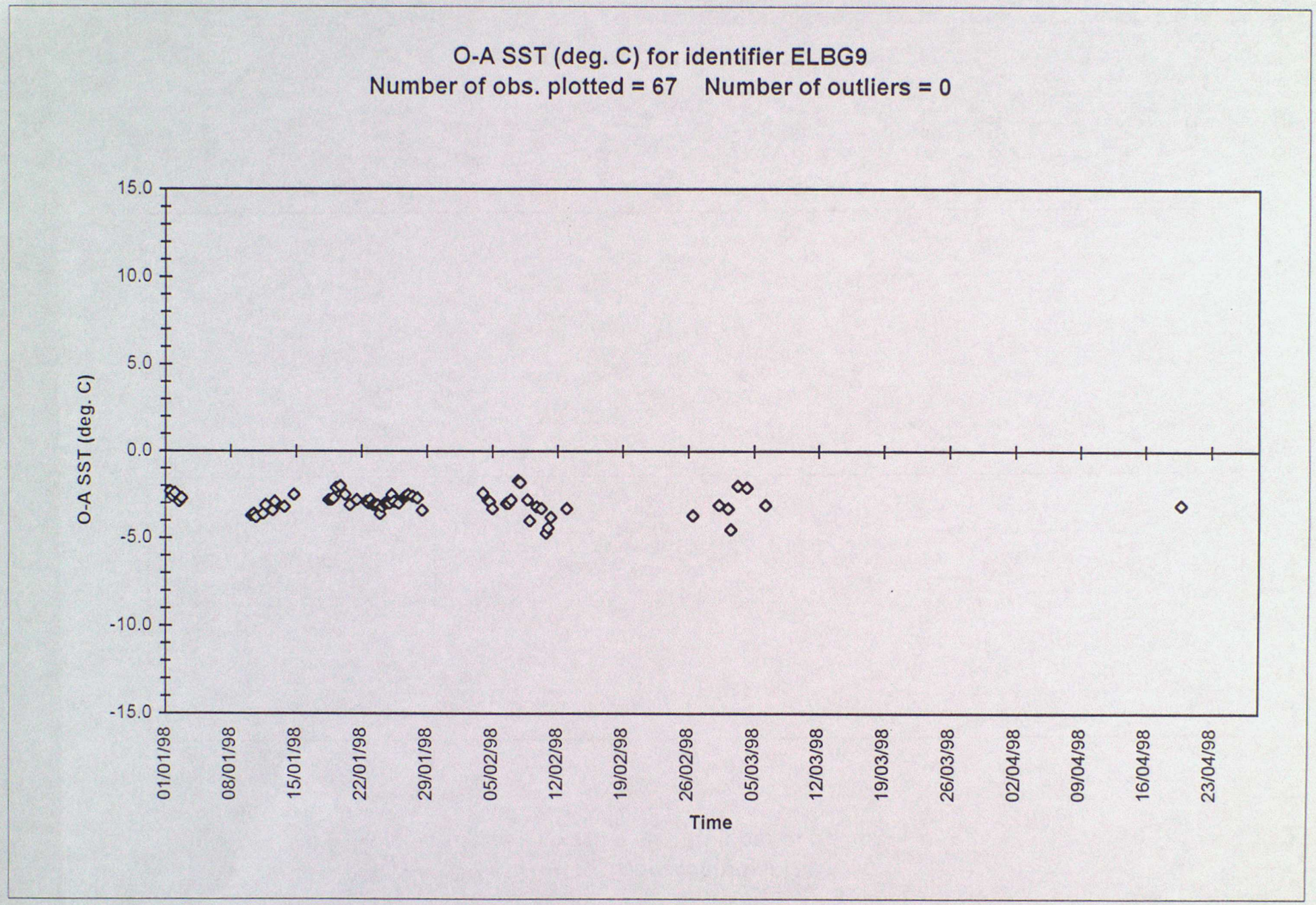
O-A SST (deg. C) for identifier C6JN
Number of obs. plotted = 83 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

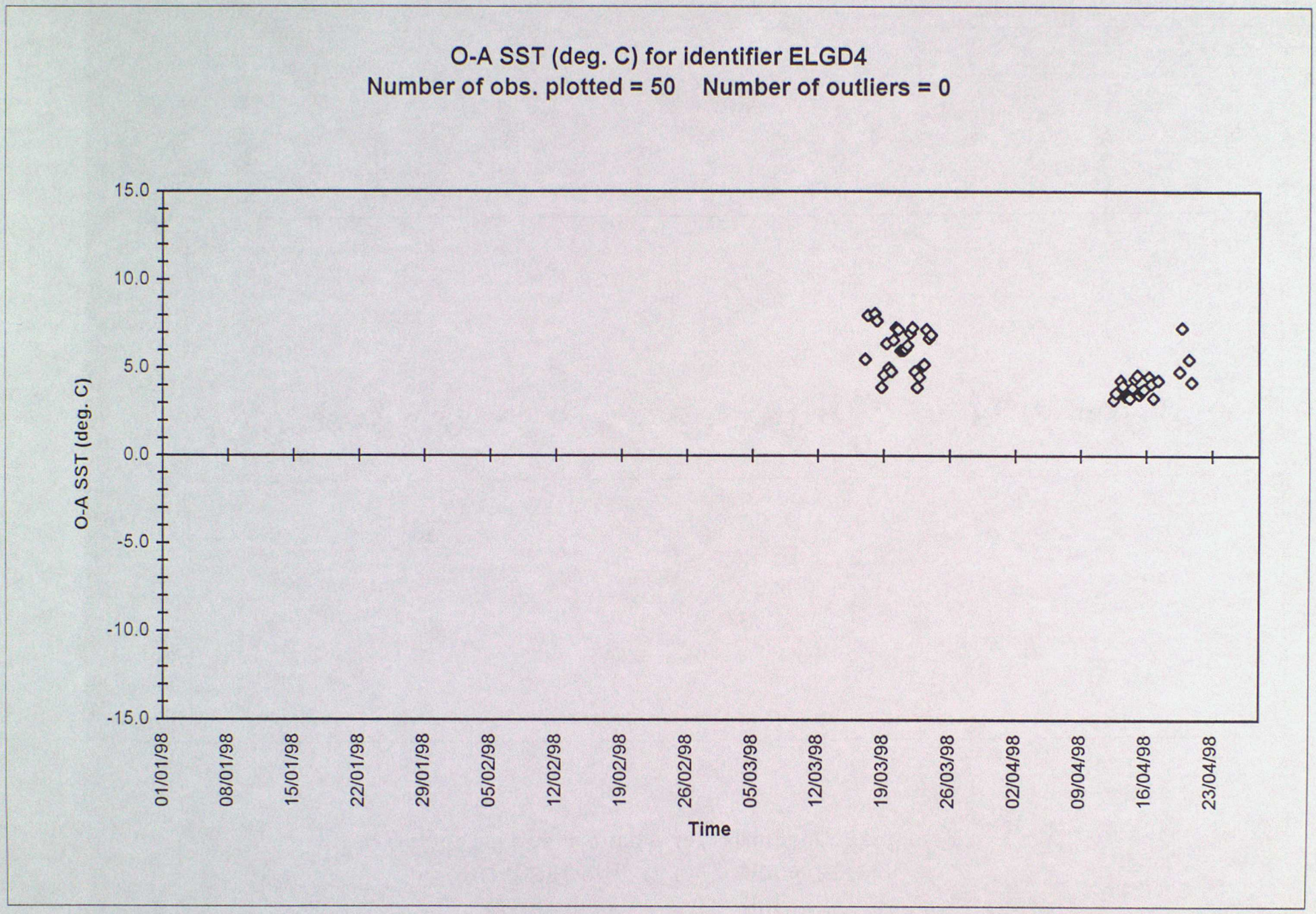

O-A SST (deg. C) for identifier C6LC4
Number of obs. plotted = 118 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier C6MS4
Number of obs. plotted = 75 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

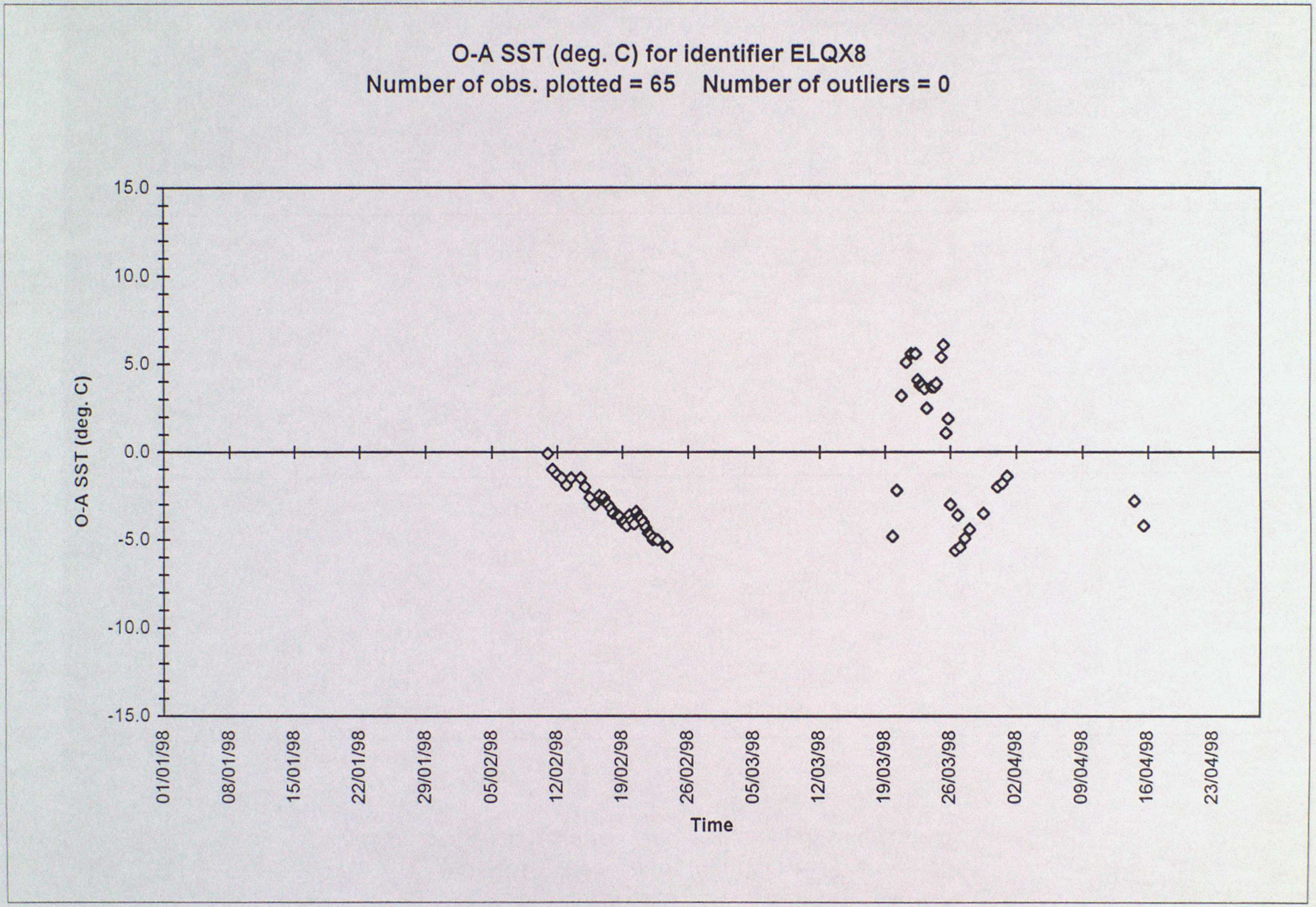
O-A SST (deg. C) for identifier DGOS
Number of obs. plotted = 121 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier DZDI
Number of obs. plotted = 46 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

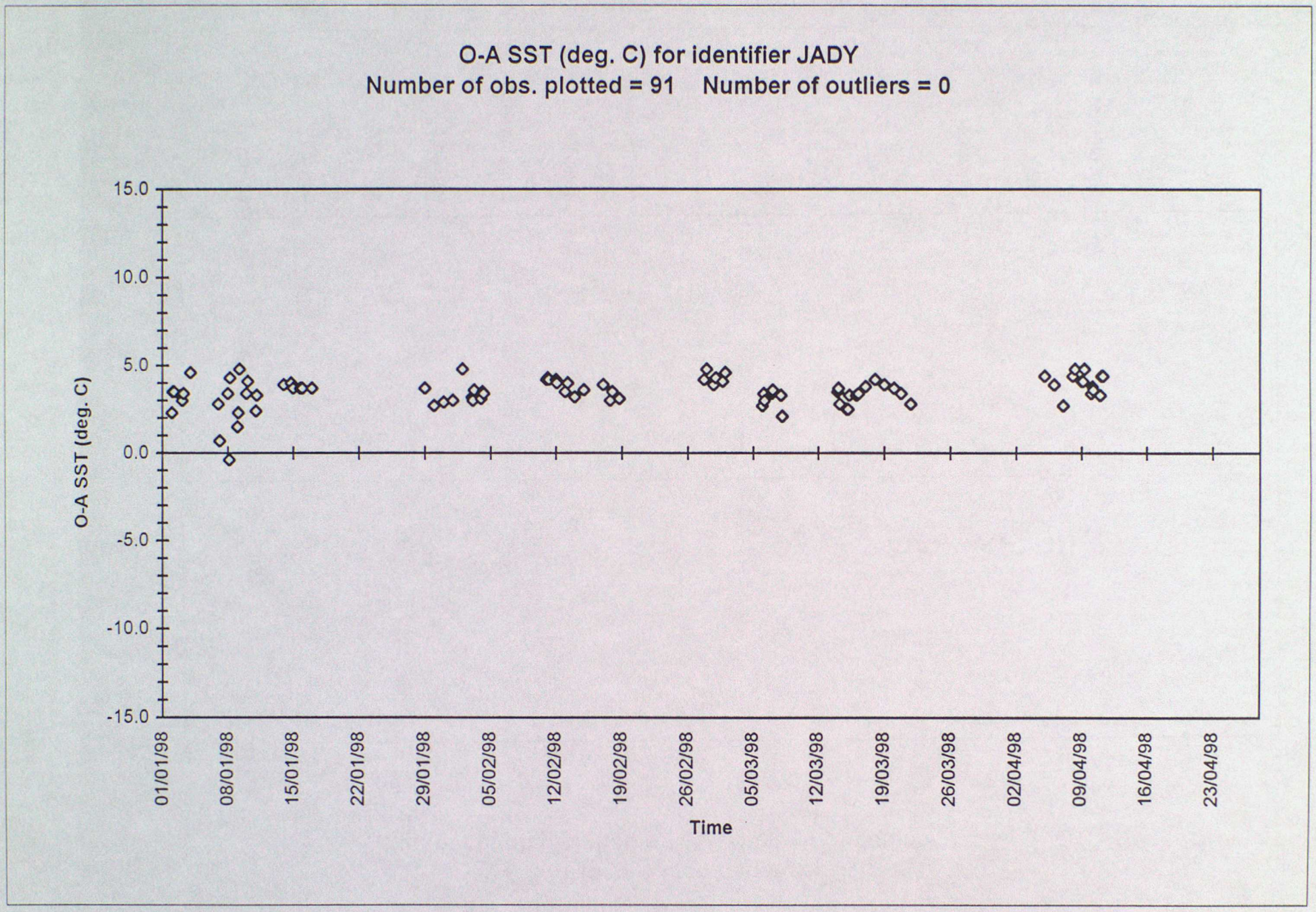

O-A SST (deg. C) for identifier ELBG9
Number of obs. plotted = 67 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier ELGD4
Number of obs. plotted = 50 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

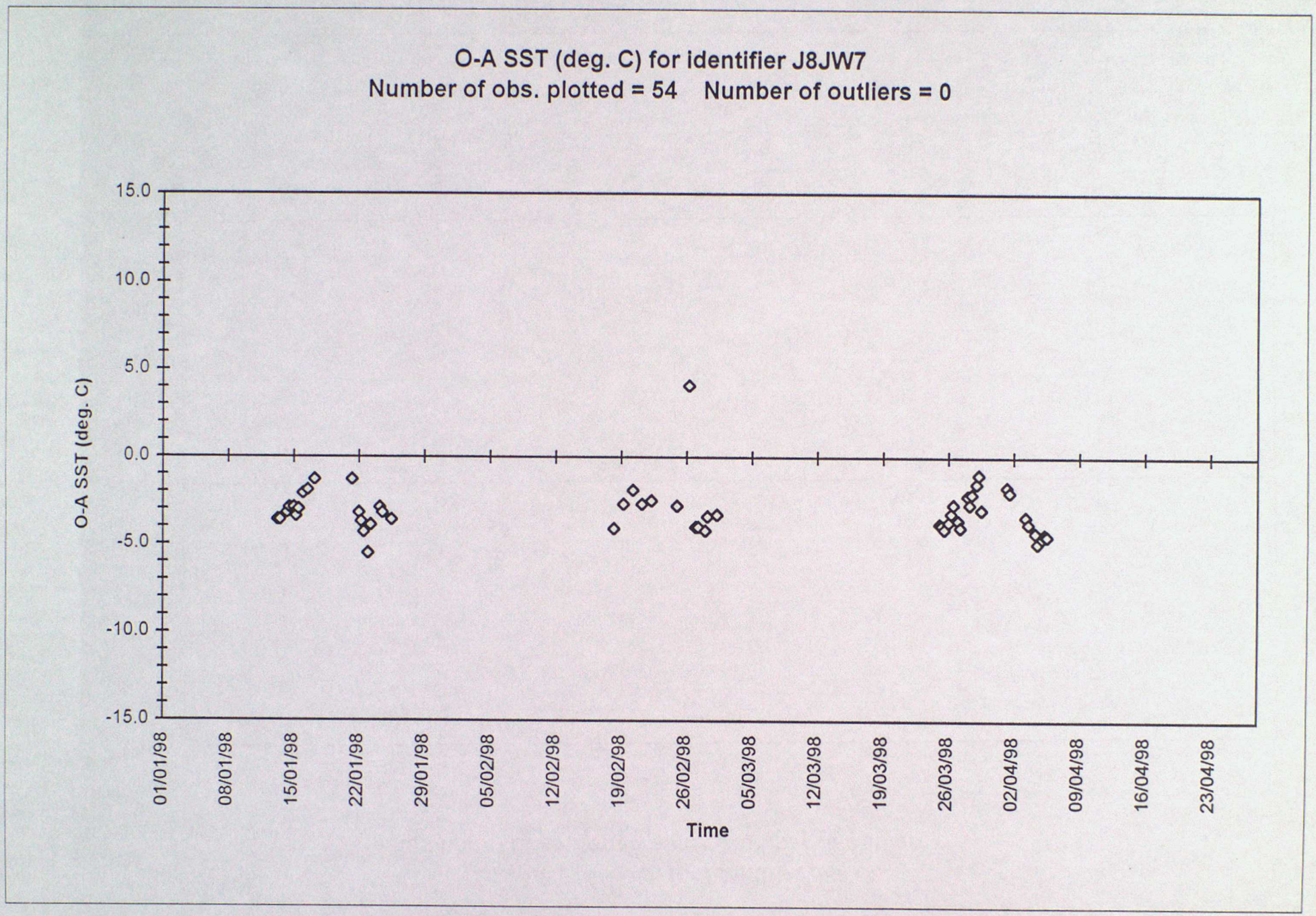
O-A SST (deg. C) for identifier ELPN9
Number of obs. plotted = 338 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

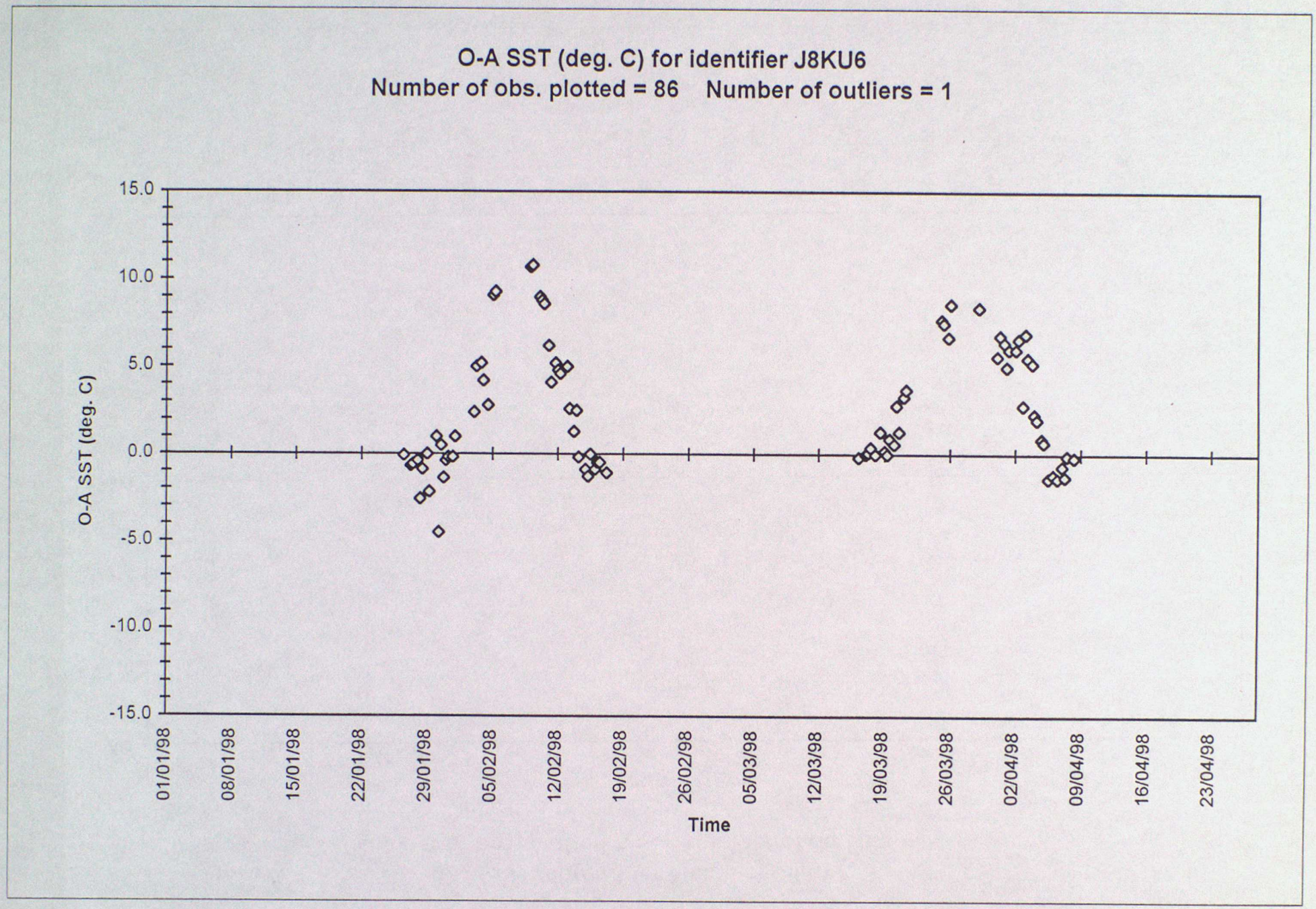

O-A SST (deg. C) for identifier ELQX8
Number of obs. plotted = 65 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier ELRT3
Number of obs. plotted = 45 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

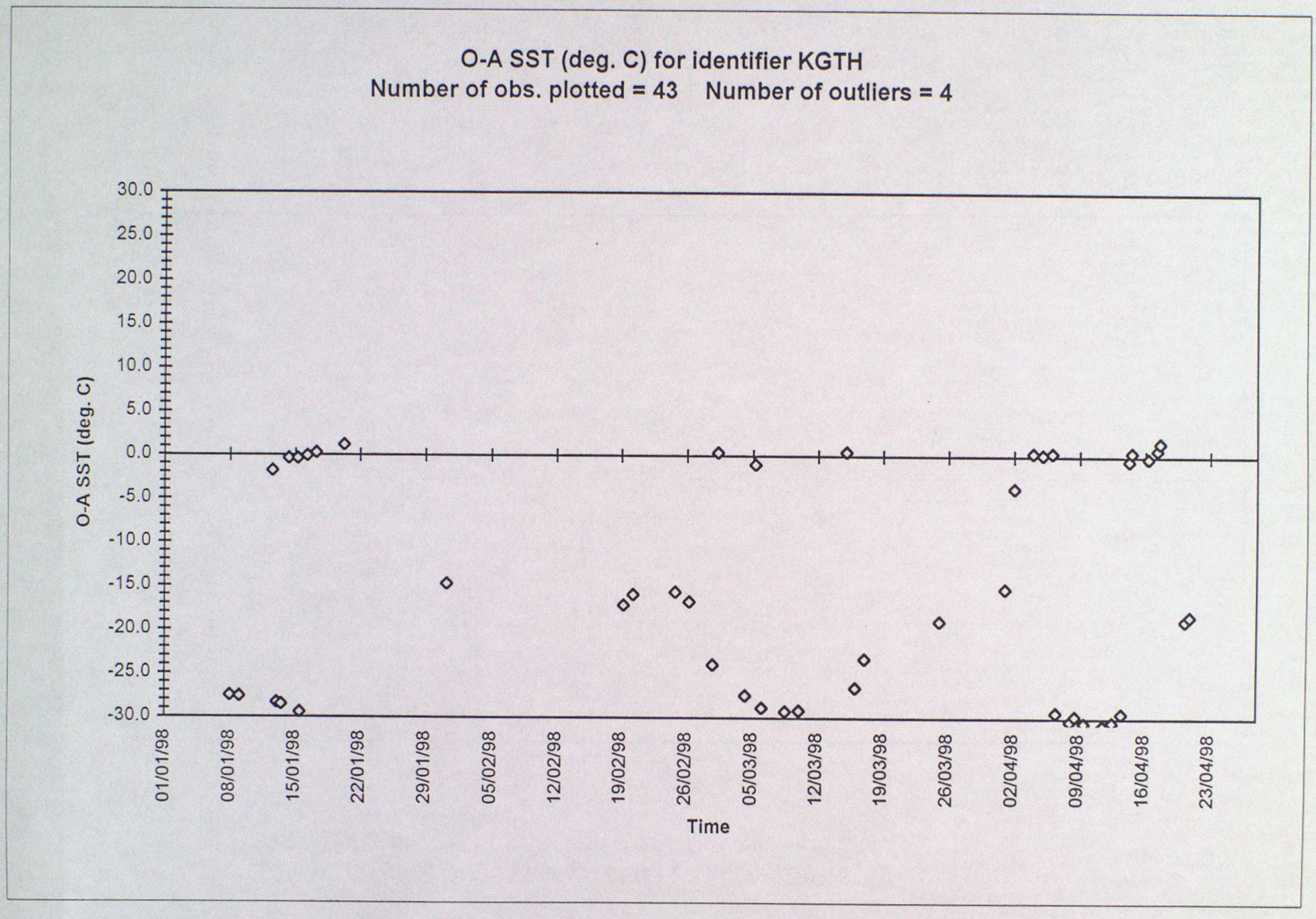

O-A SST (deg. C) for identifier JADY
Number of obs. plotted = 91 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

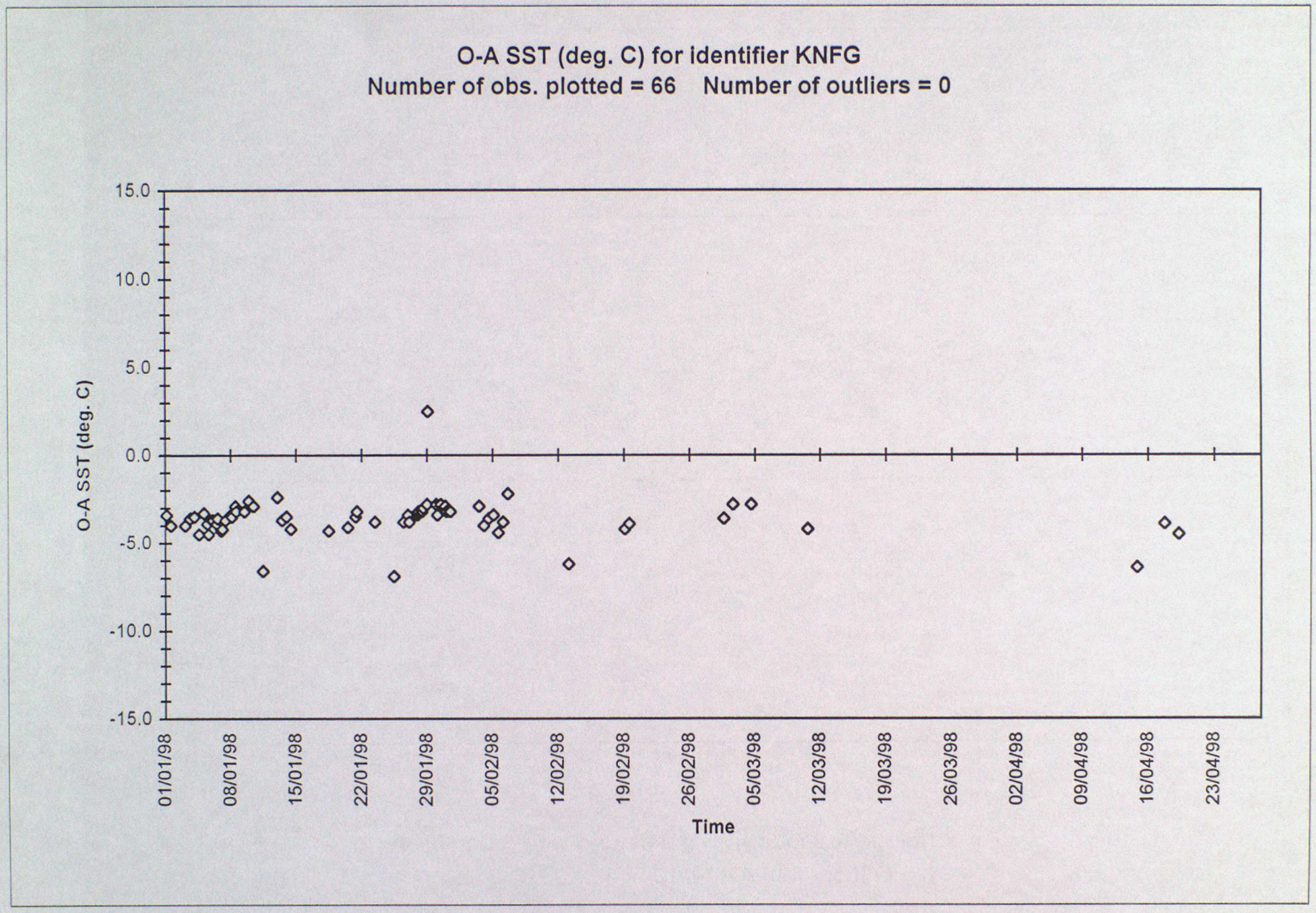
O-A SST (deg. C) for identifier JBGY
Number of obs. plotted = 105 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier J8JW7
Number of obs. plotted = 54 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

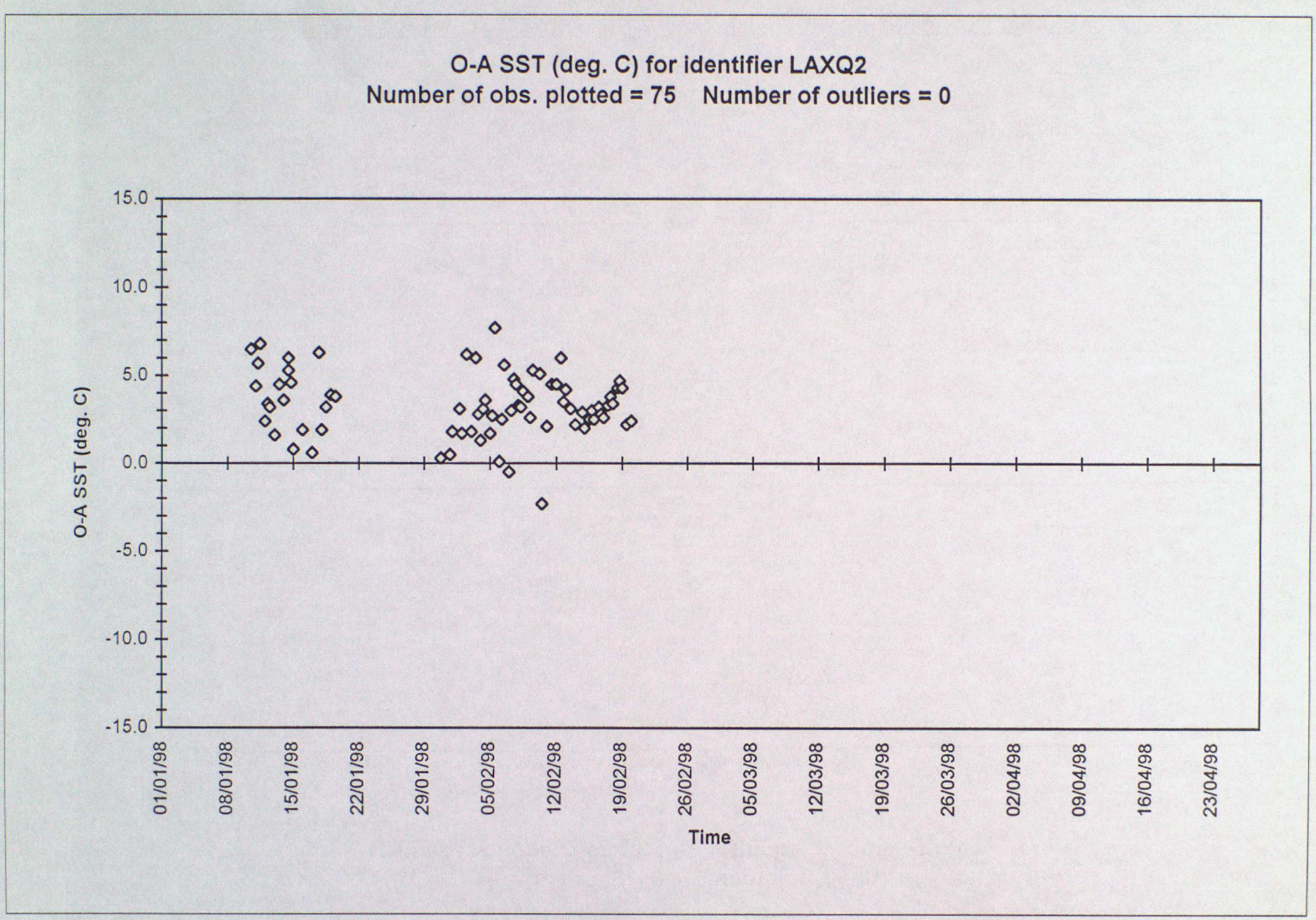

O-A SST (deg. C) for identifier J8KU6
Number of obs. plotted = 86 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier KBGK
Number of obs. plotted = 69 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

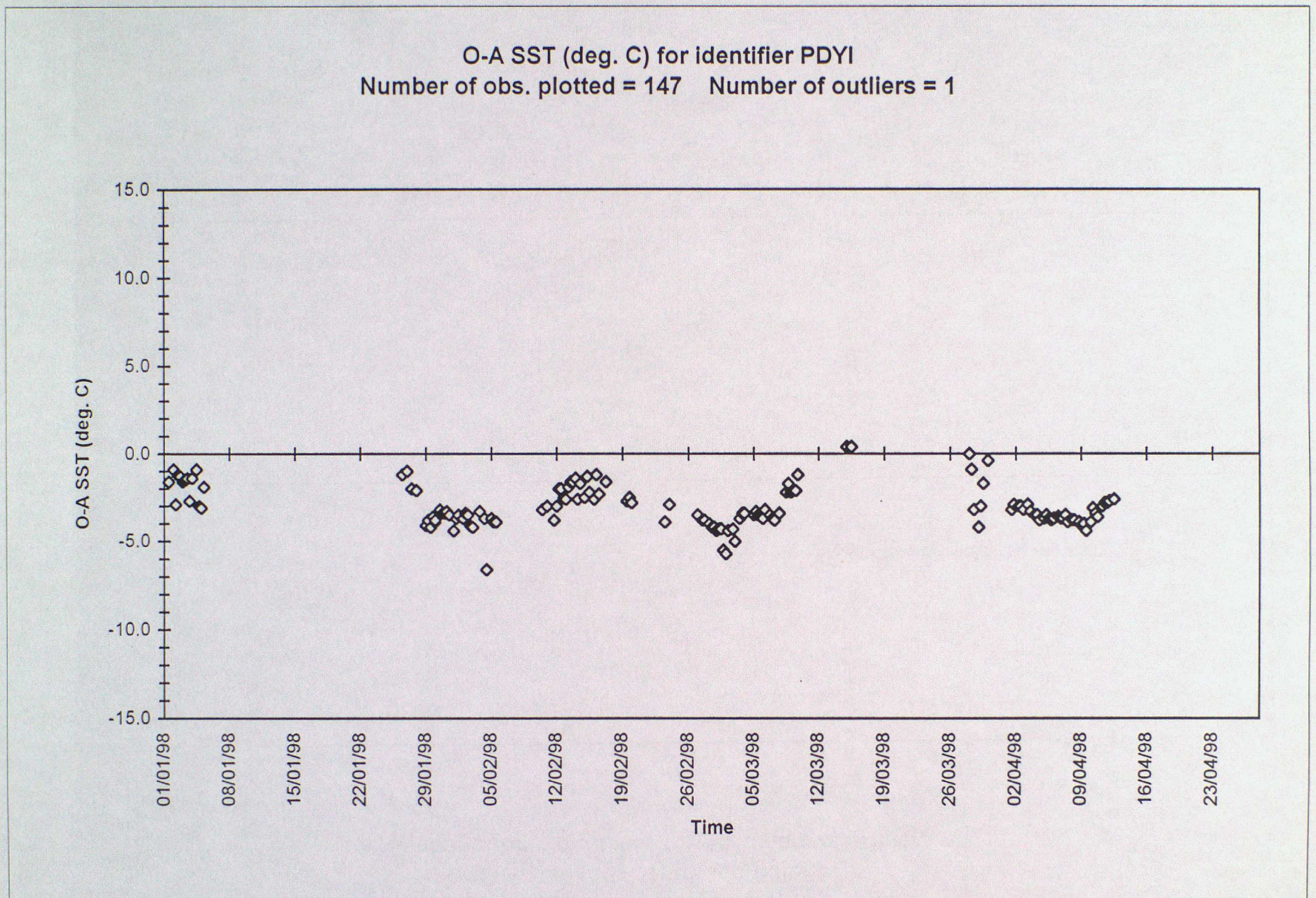

O-A SST (deg. C) for identifier KGTH
Number of obs. plotted = 43 Number of outliers = 4
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

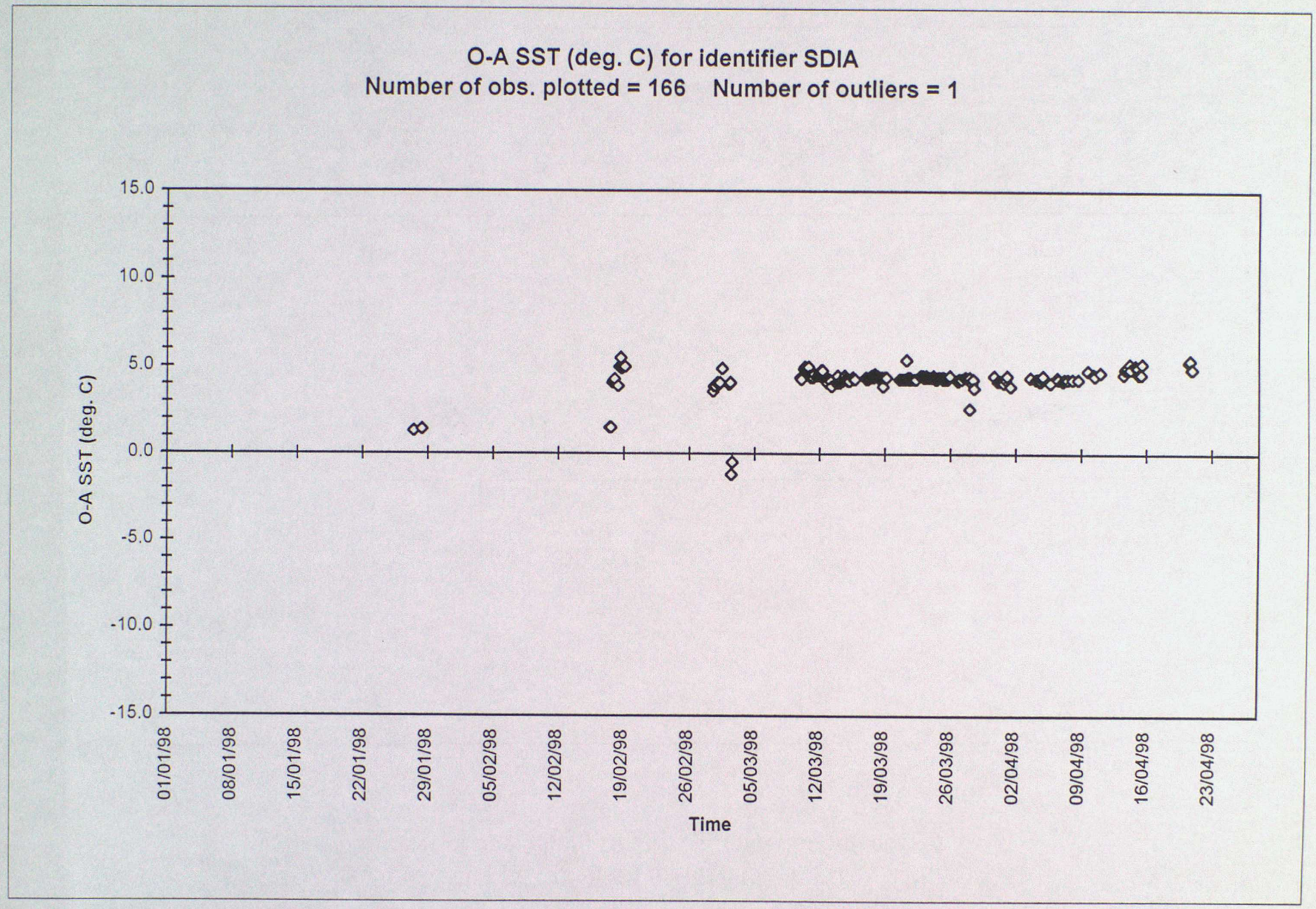

O-A SST (deg. C) for identifier KNFG
Number of obs. plotted = 66 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier KNLO
Number of obs. plotted = 69 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98


O-A SST (deg. C) for identifier LAXQ2
Number of obs. plotted = 75 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

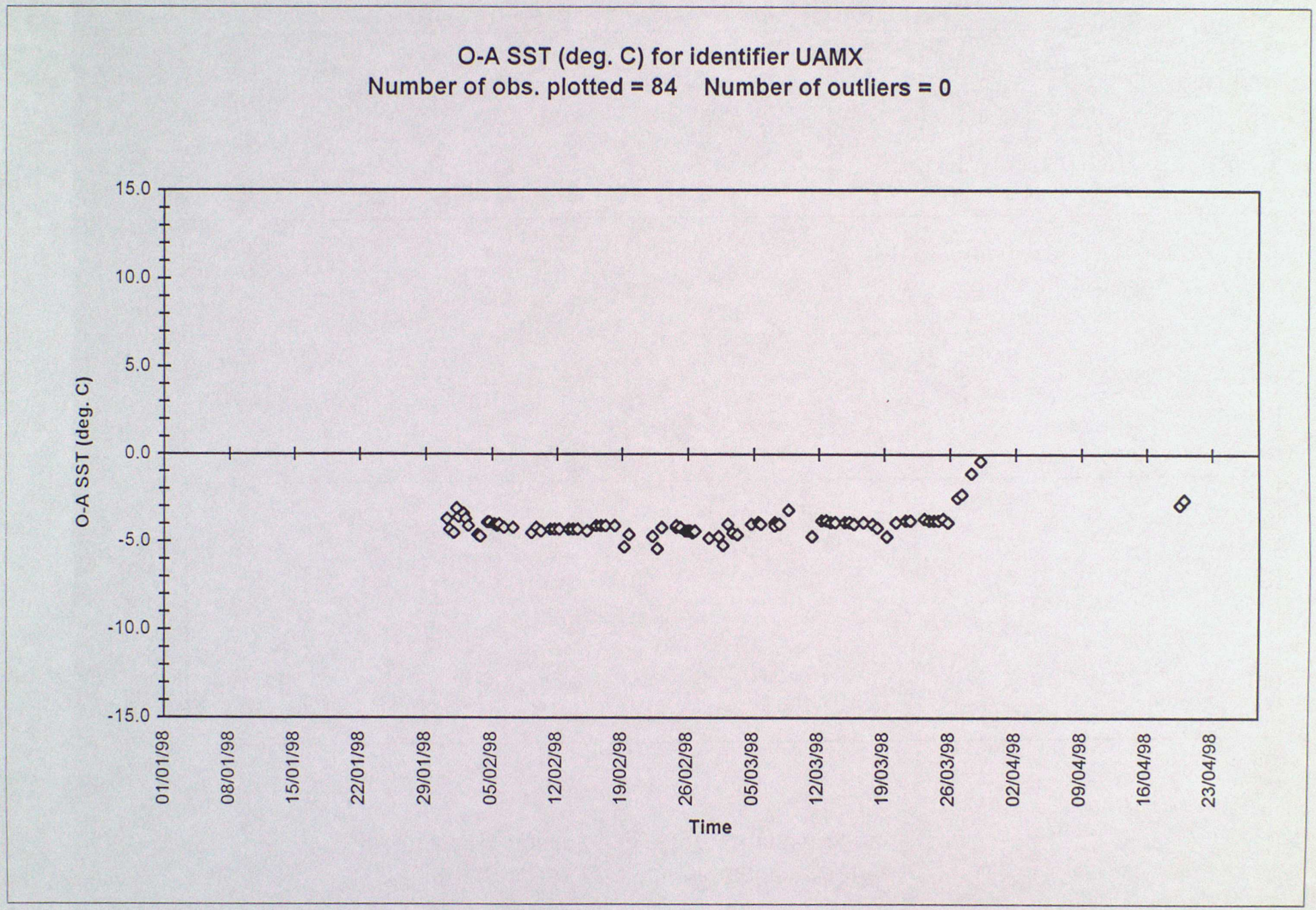
O-A SST (deg. C) for identifier NFMK
Number of obs. plotted = 74 Number of outliers = 0
O-A SST (deg. c)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

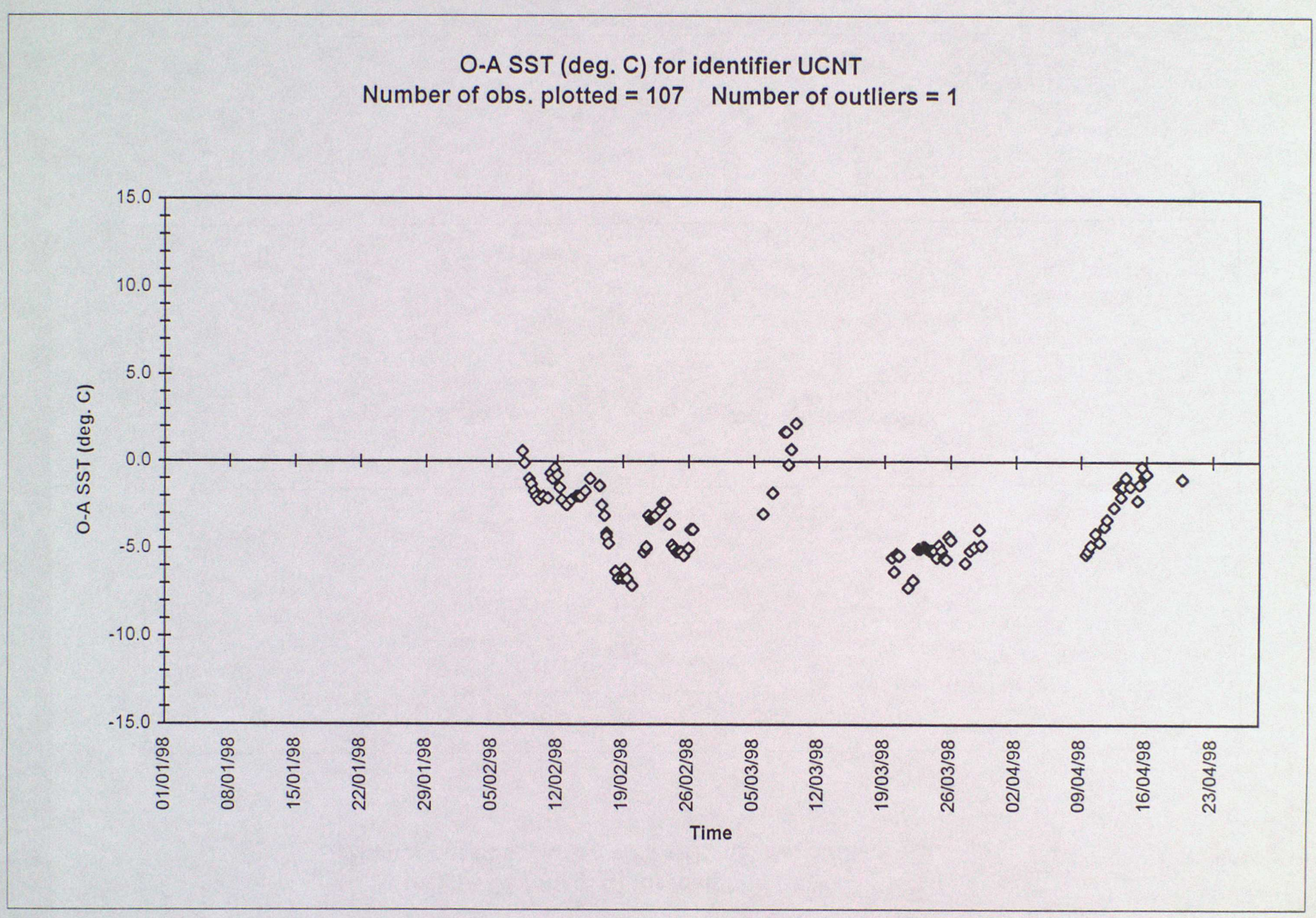

O-A SST (deg. C) for identifier PDYI
Number of obs. plotted = 147 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

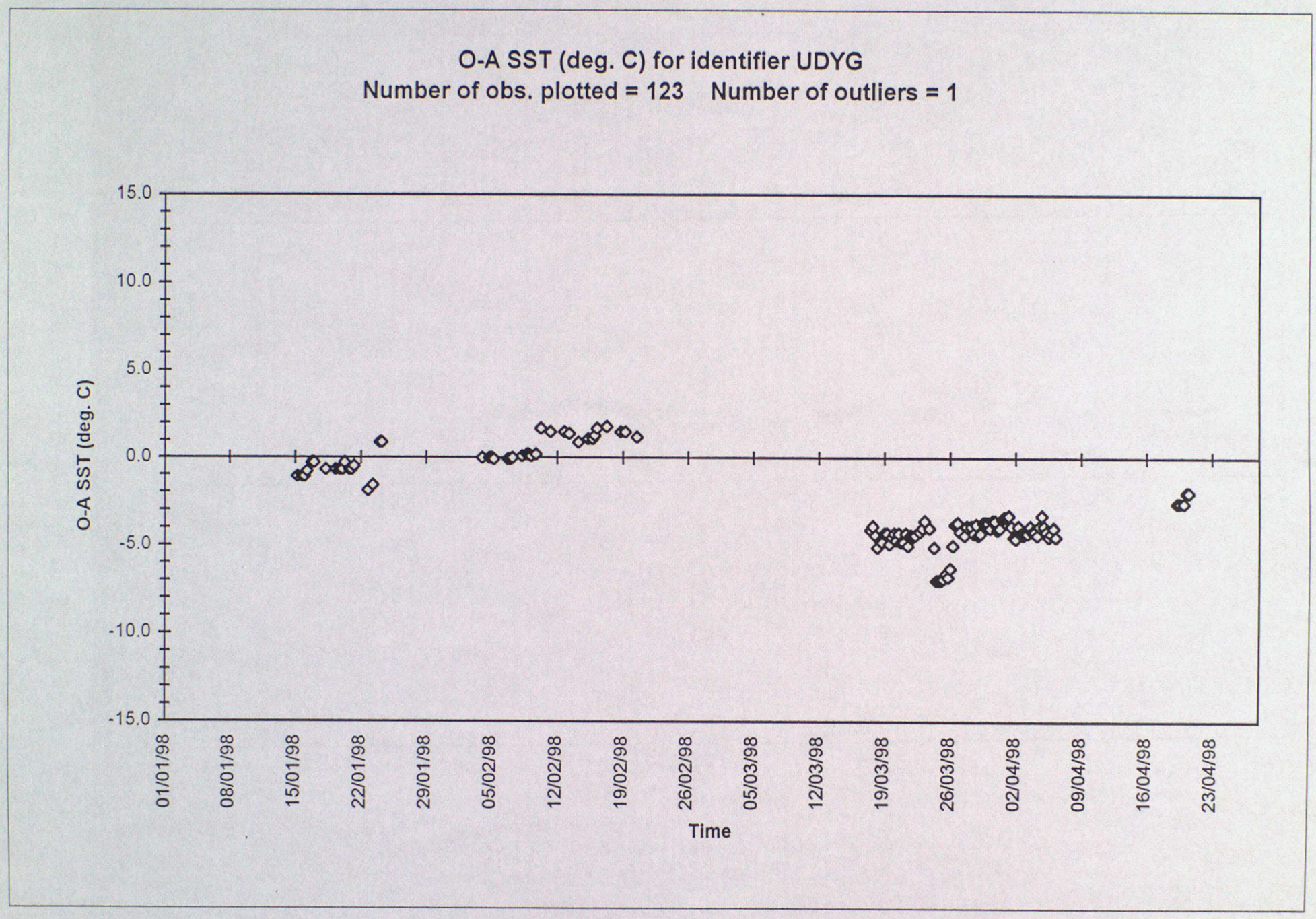

O-A SST (deg. C) for identifier SDIA
Number of obs. plotted = 166 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

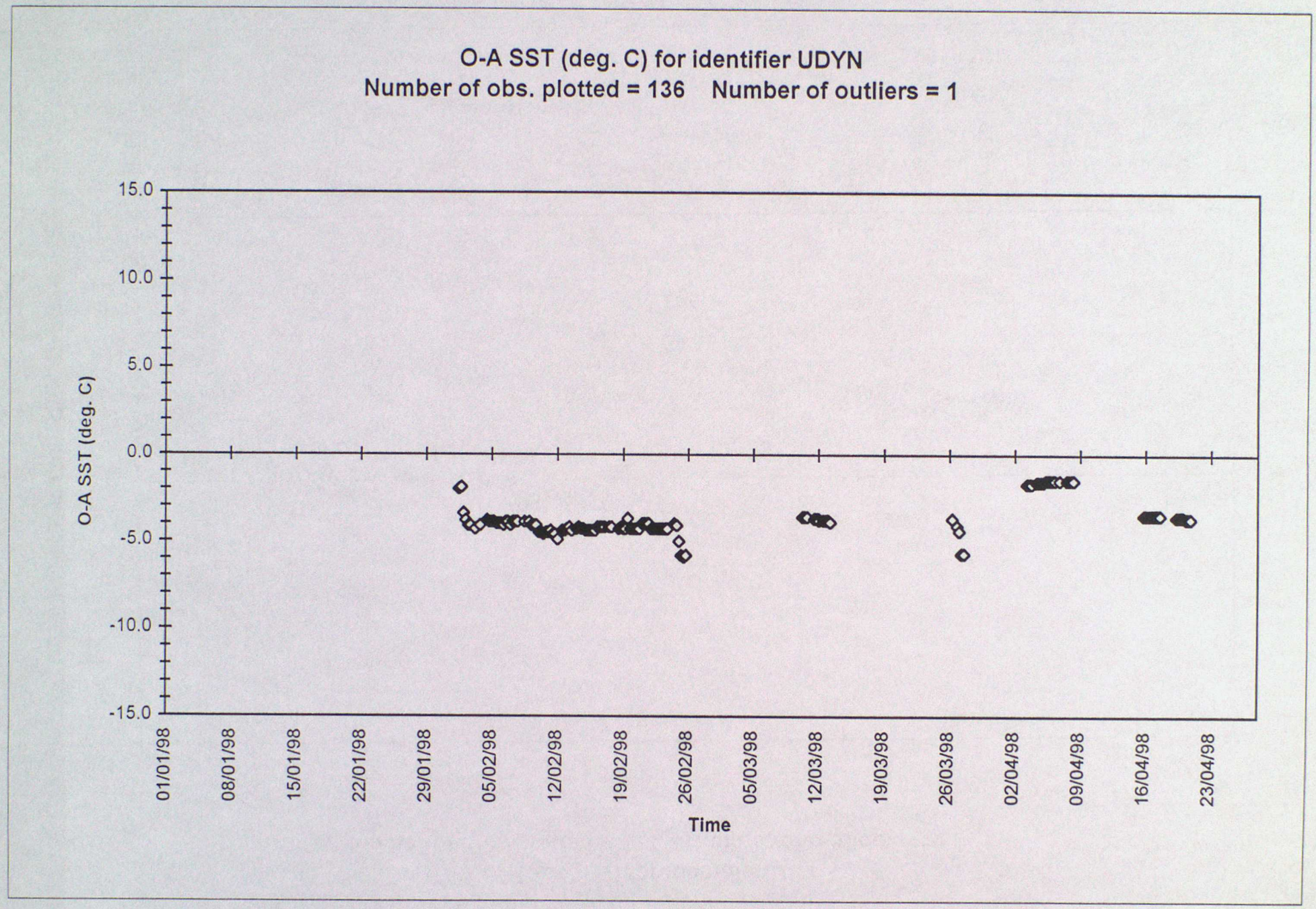
O-A SST (deg. C) for identifier SFRZ
Number of obs. plotted = 174 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98

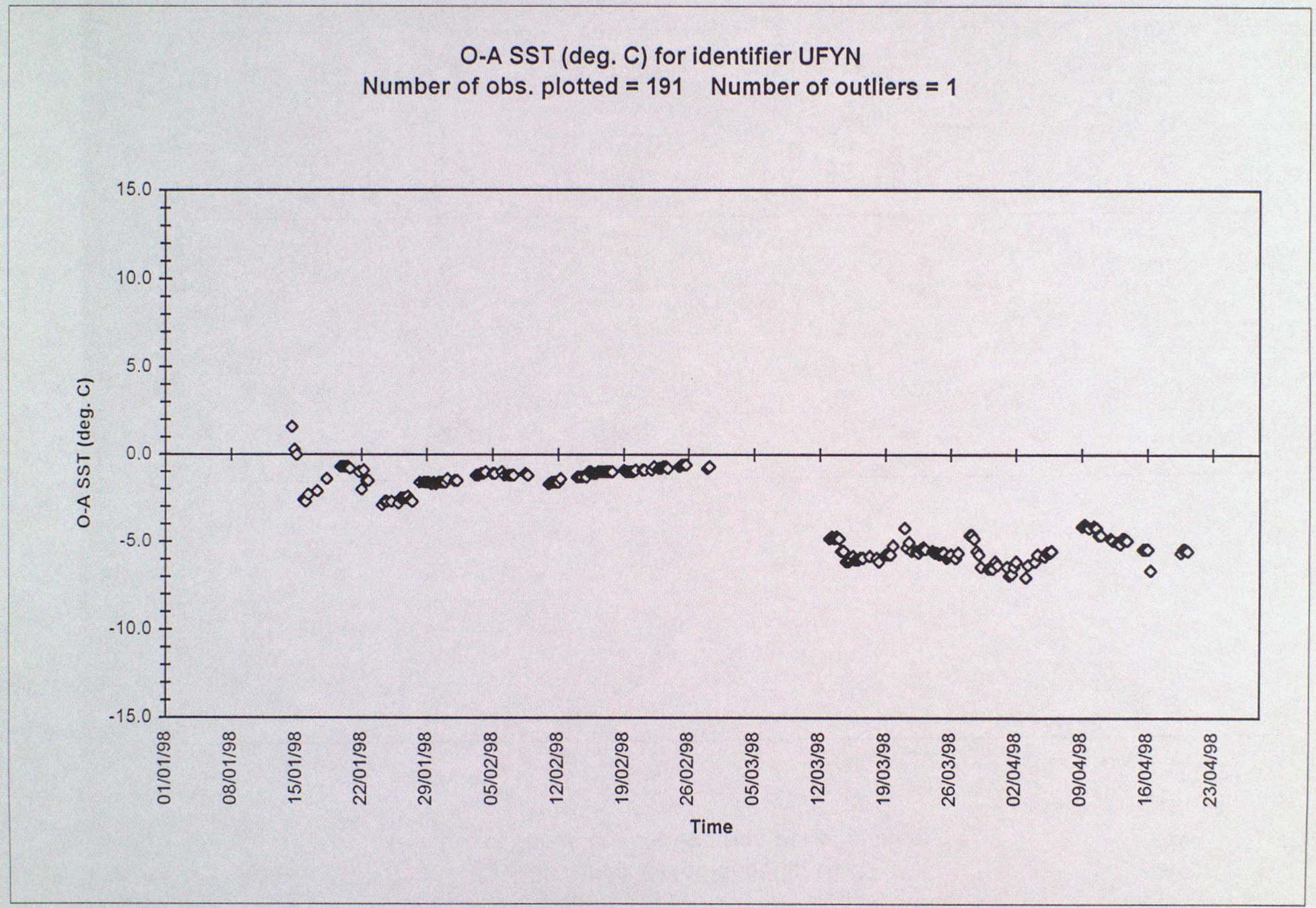
O-A SST (deg. C) for identifier S6ES
Number of obs. plotted = 162 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

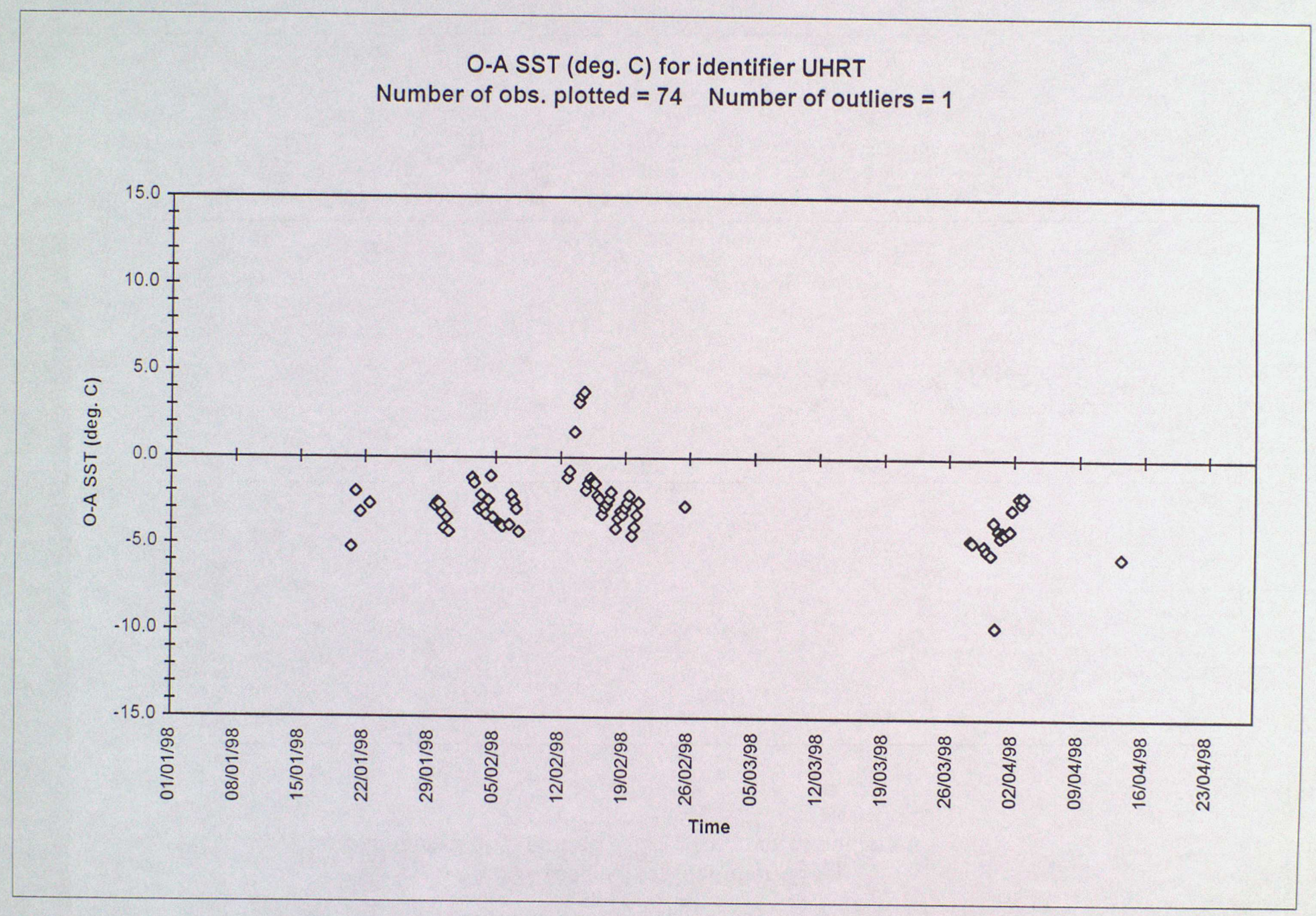

O-A SST (deg. C) for identifier UAMX
Number of obs. plotted = 84 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

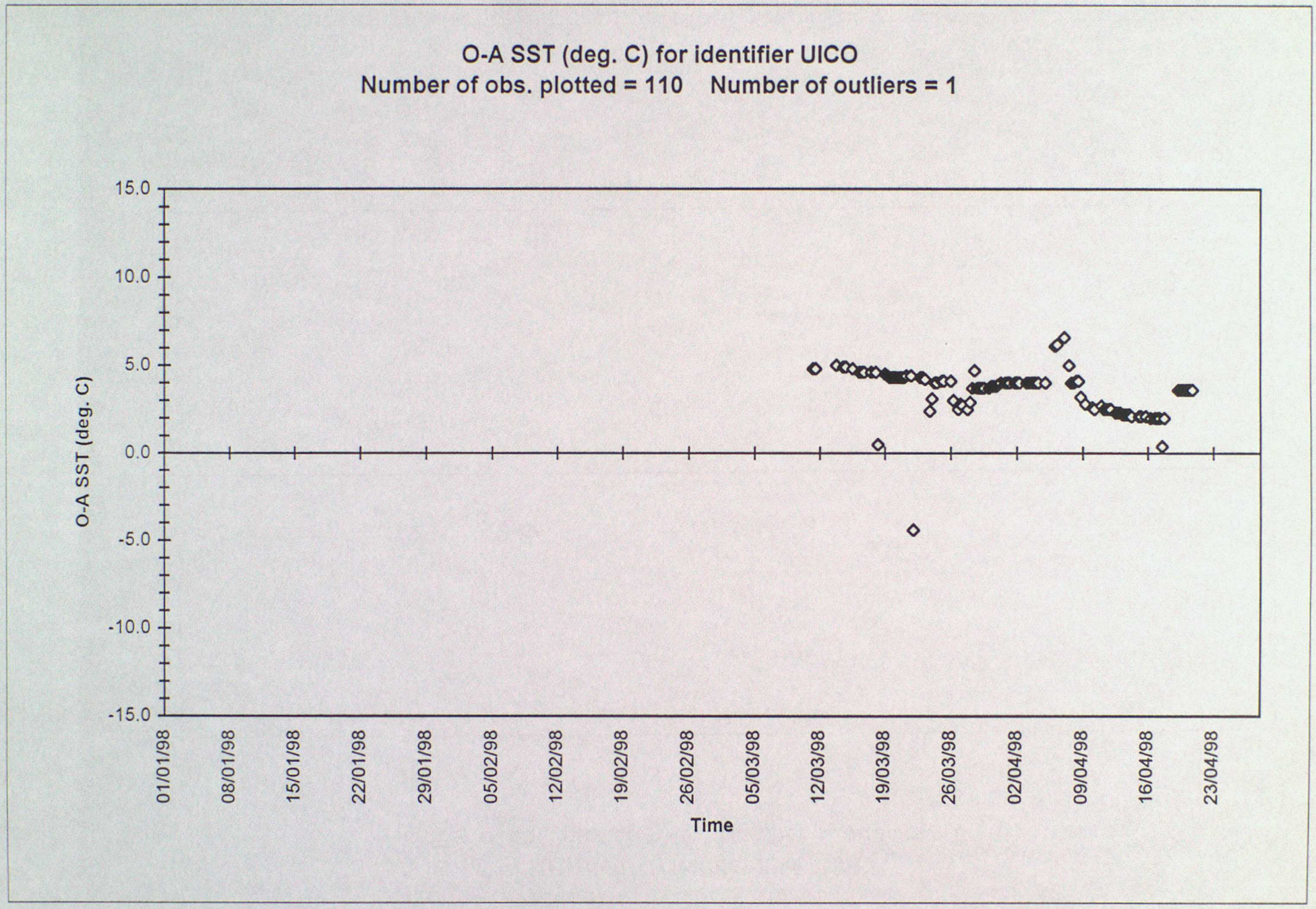

O-A SST (deg. C) for identifier UCNT
Number of obs. plotted = 107 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

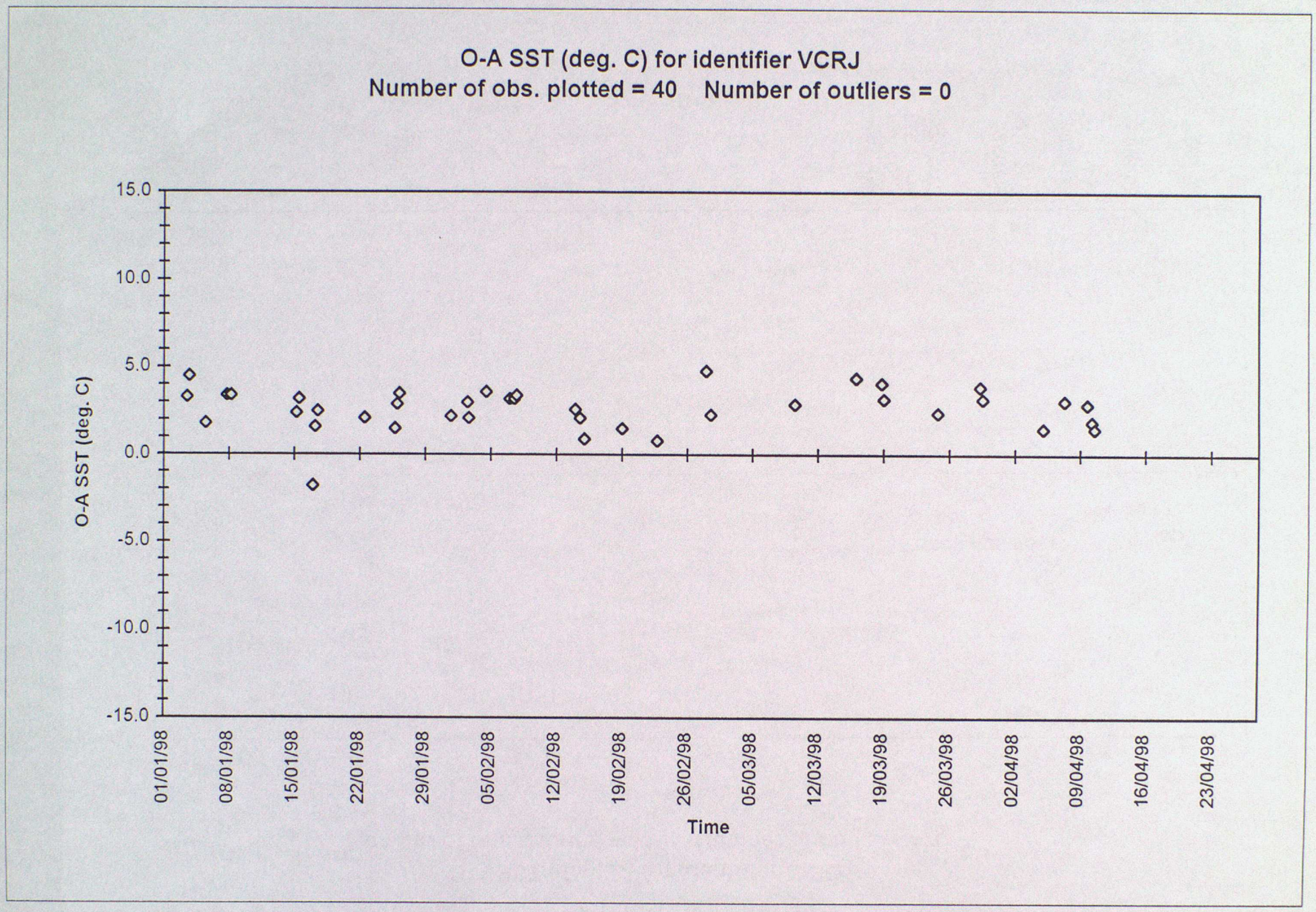

O-A SST (deg. C) for identifier UDYG
Number of obs. plotted = 123 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

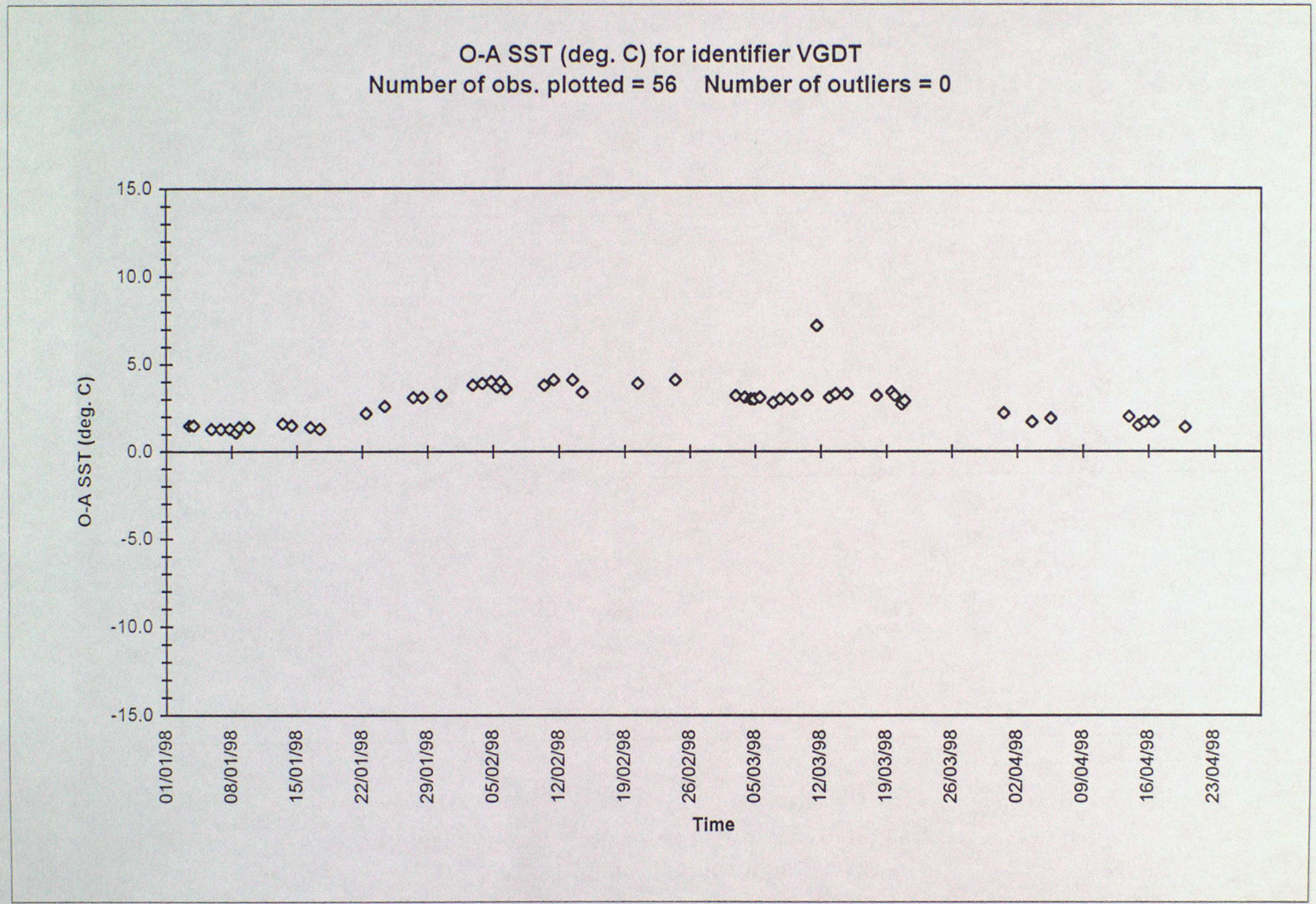

O-A SST (deg. C) for identifier UDYN
Number of obs. plotted = 136 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

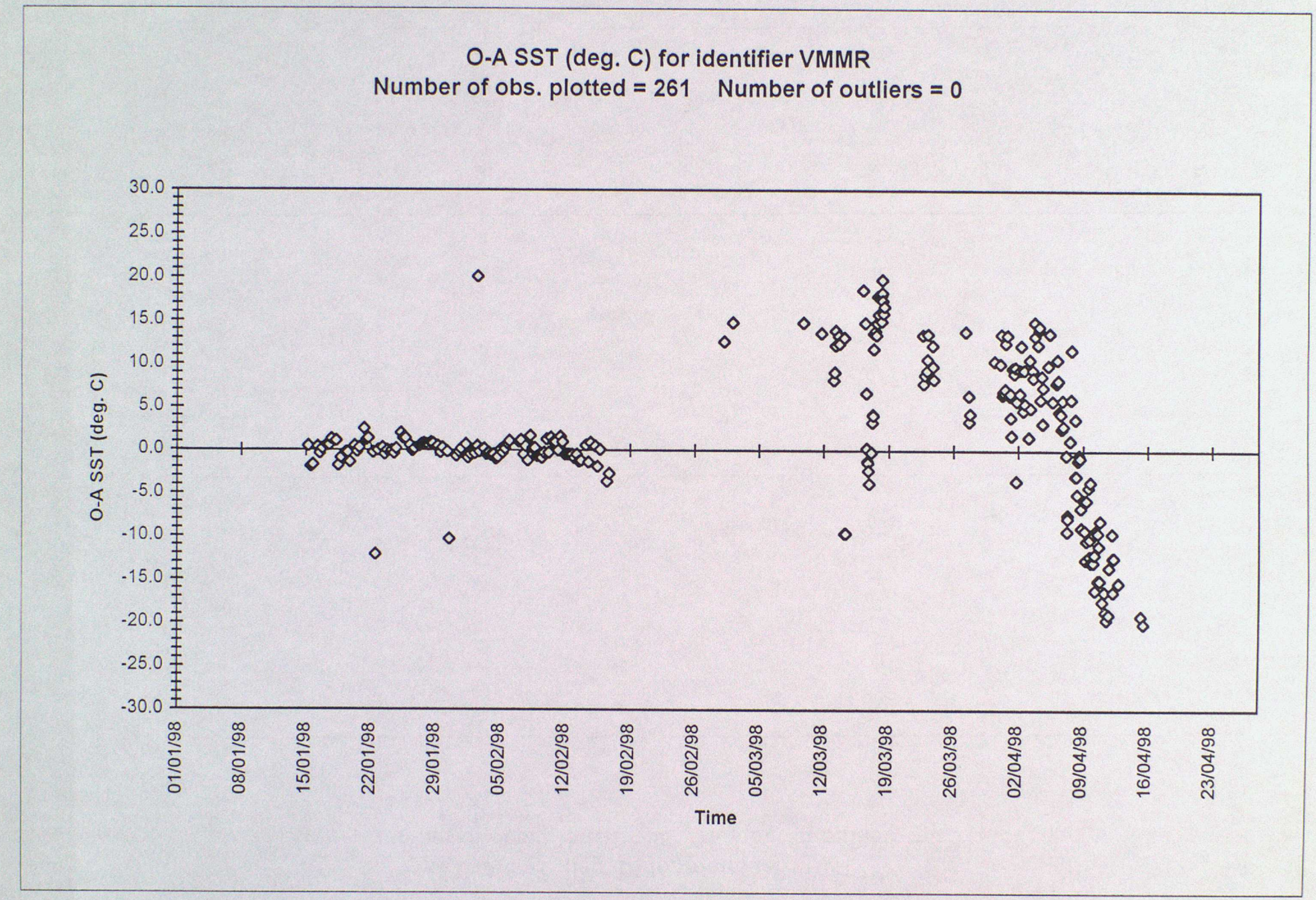

O-A SST (deg. C) for identifier UFYN
Number of obs. plotted = 191 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

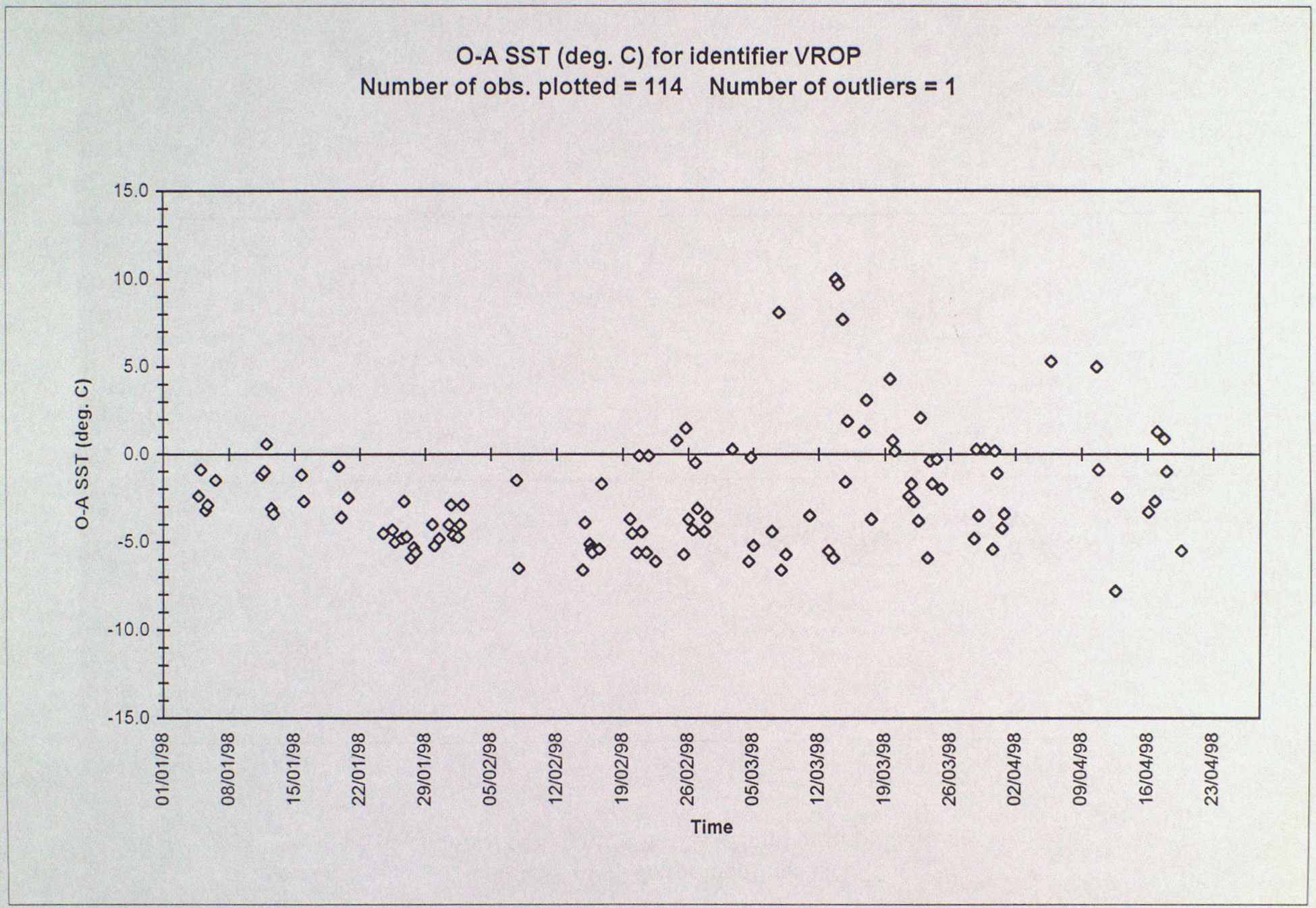

O-A SST (deg. C) for identifier UHRT
Number of obs. plotted = 74 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

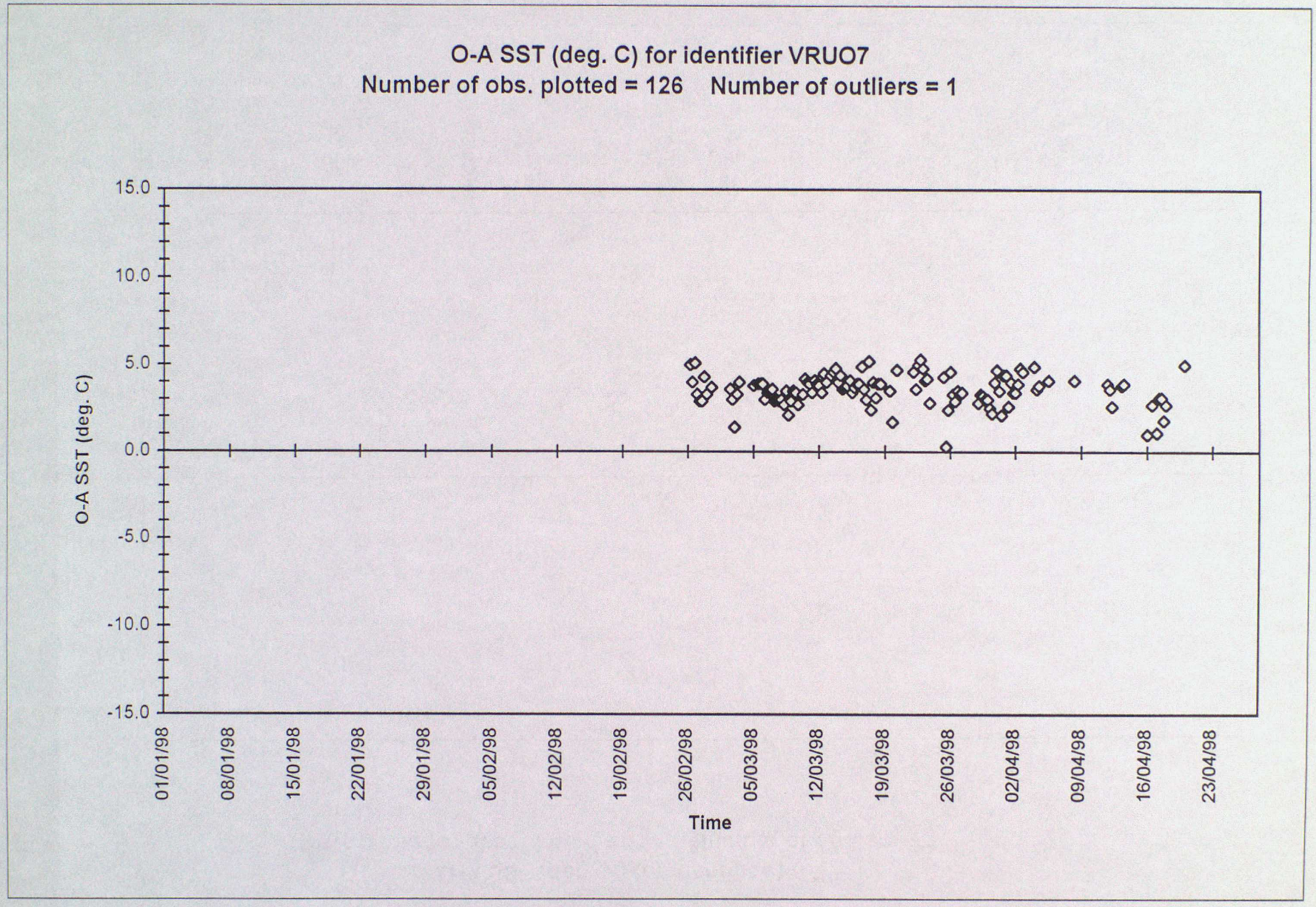

O-A SST (deg. C) for identifier UICO
Number of obs. plotted = 110 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

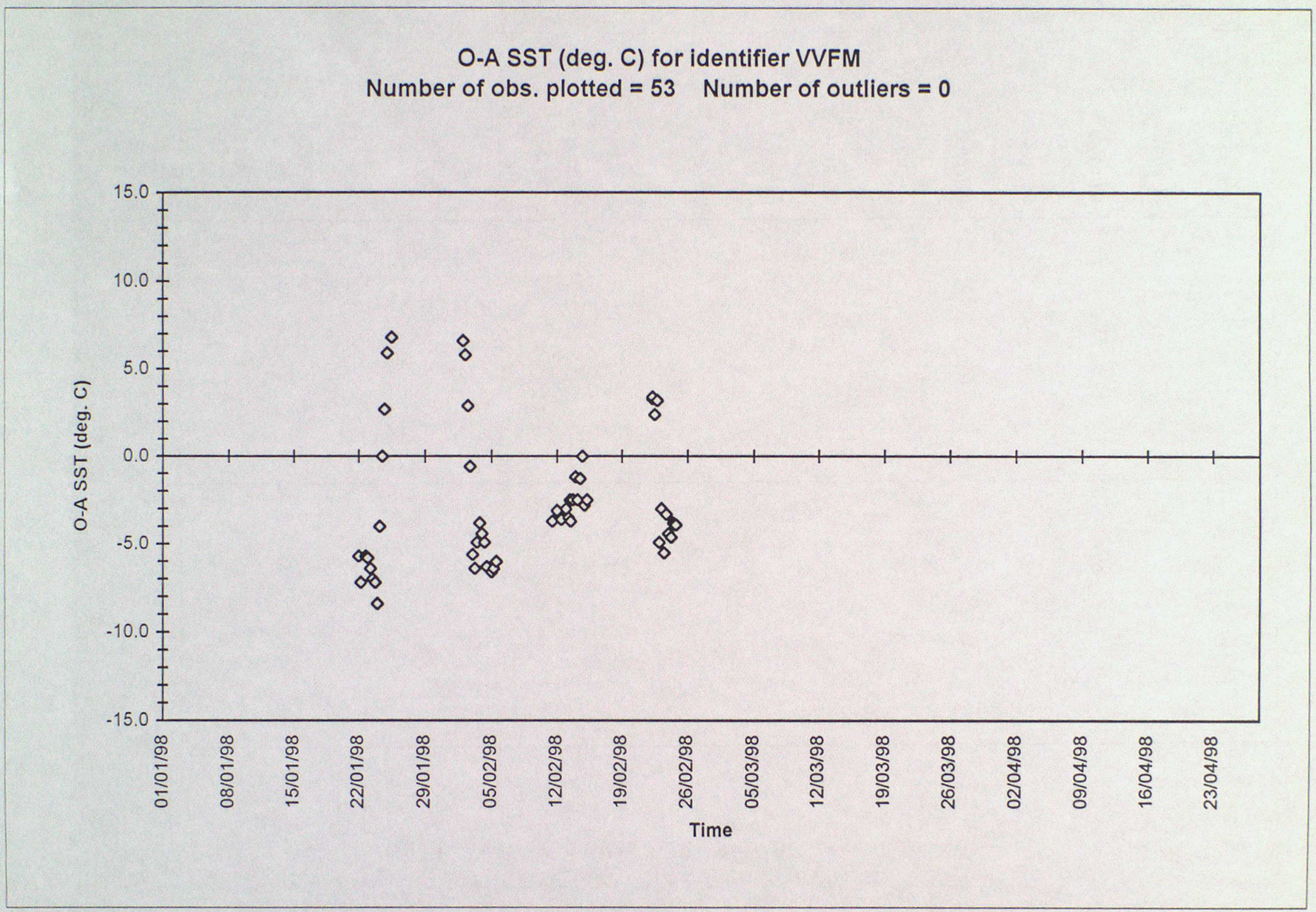

O-A SST (deg. C) for identifier VCRJ
Number of obs. plotted = 40 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

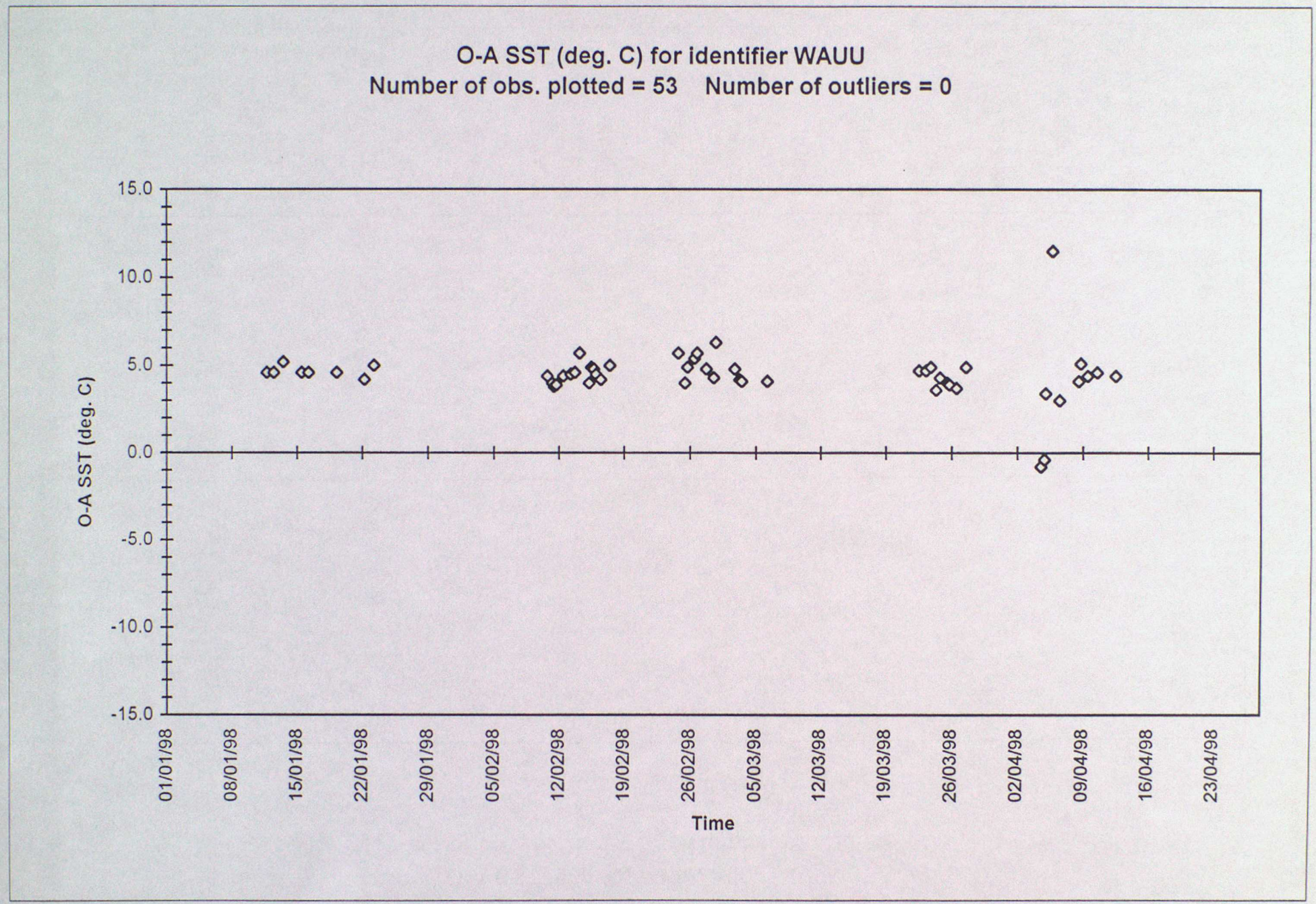

O-A SST (deg. C) for identifier VGDT
Number of obs. plotted = 56 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

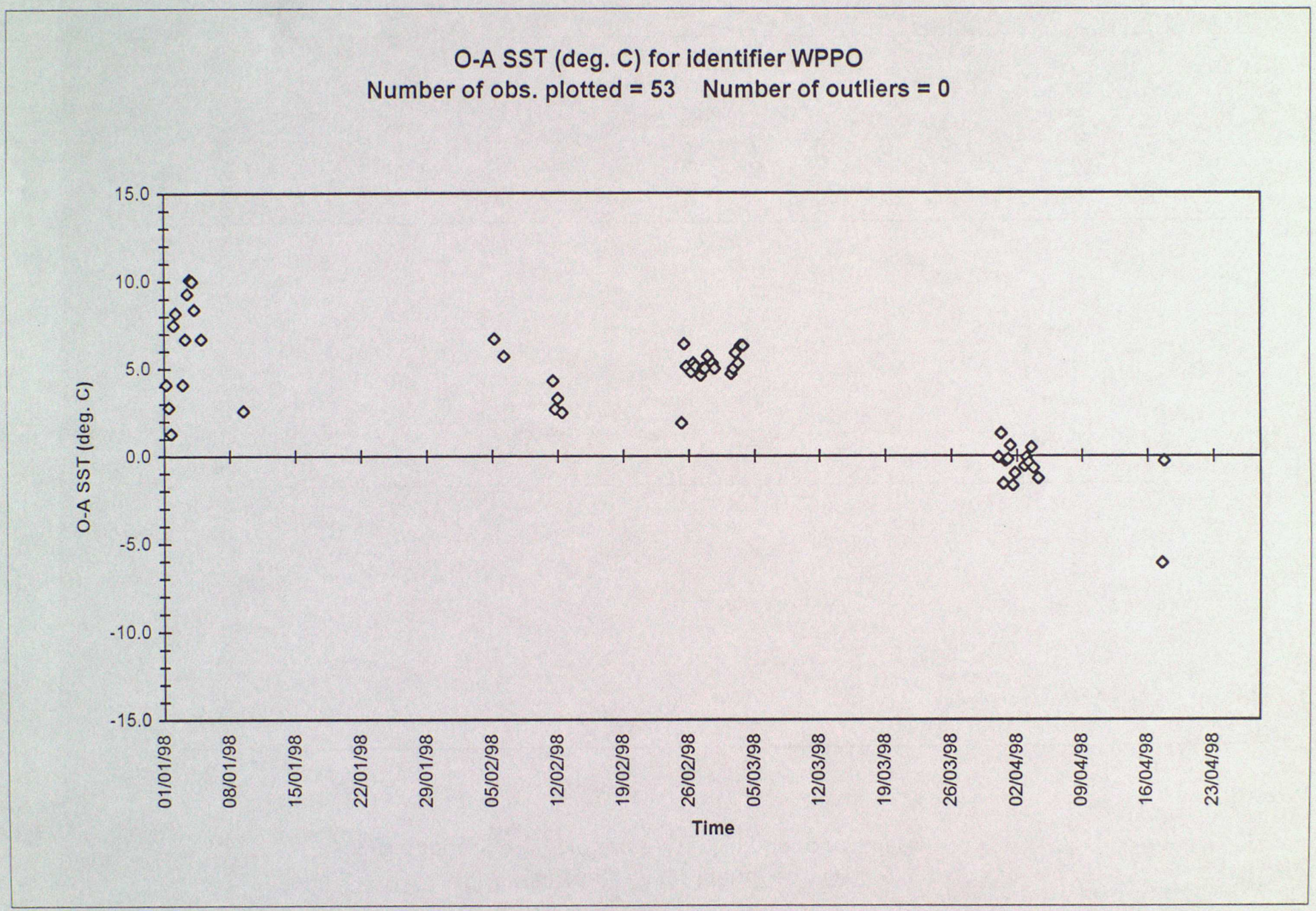

O-A SST (deg. C) for identifier VMMR
Number of obs. plotted = 261 Number of outliers = 0
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

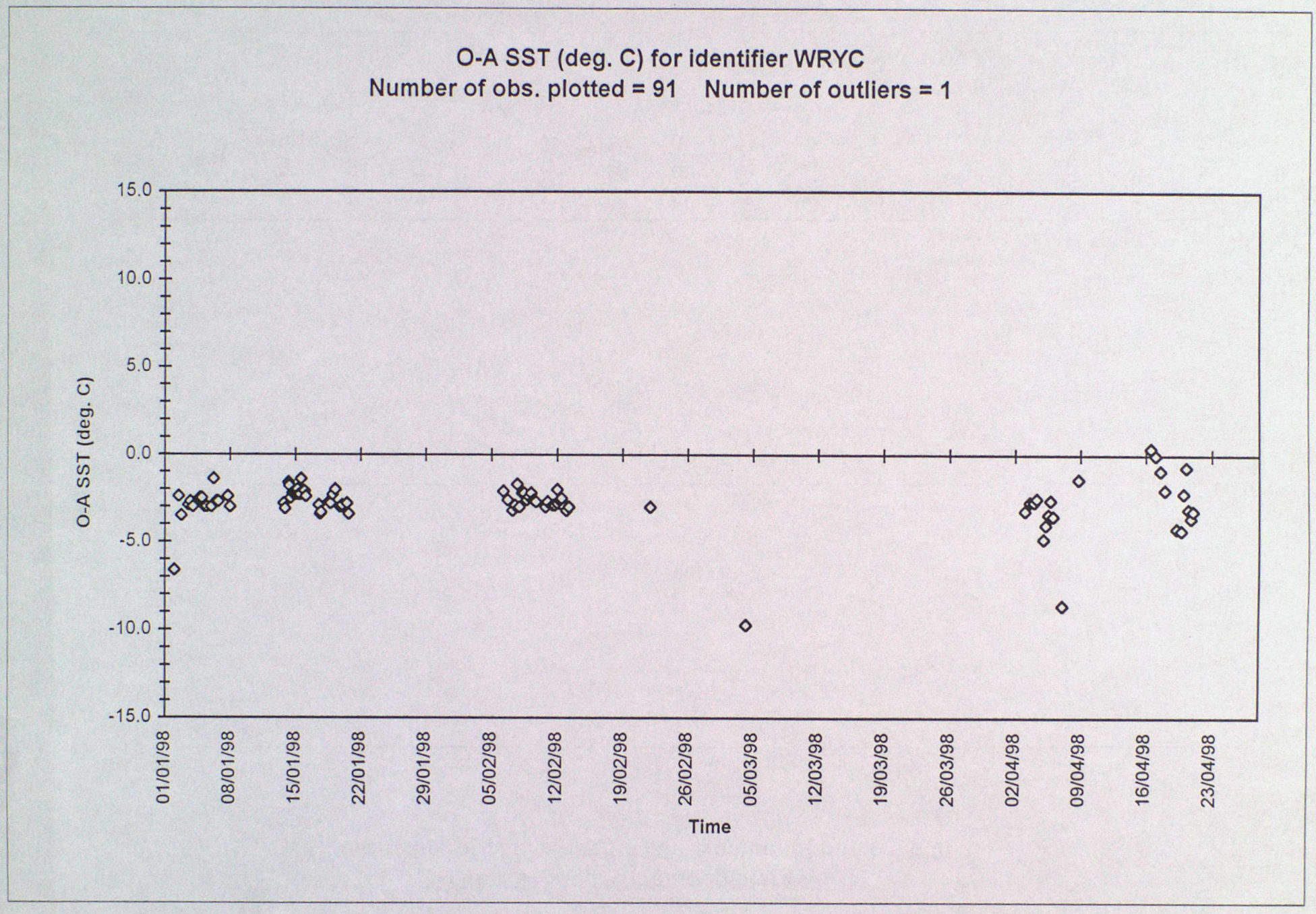

O-A SST (deg. C) for identifier VROP
Number of obs. plotted = 114 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier VRUO7
Number of obs. plotted = 126 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

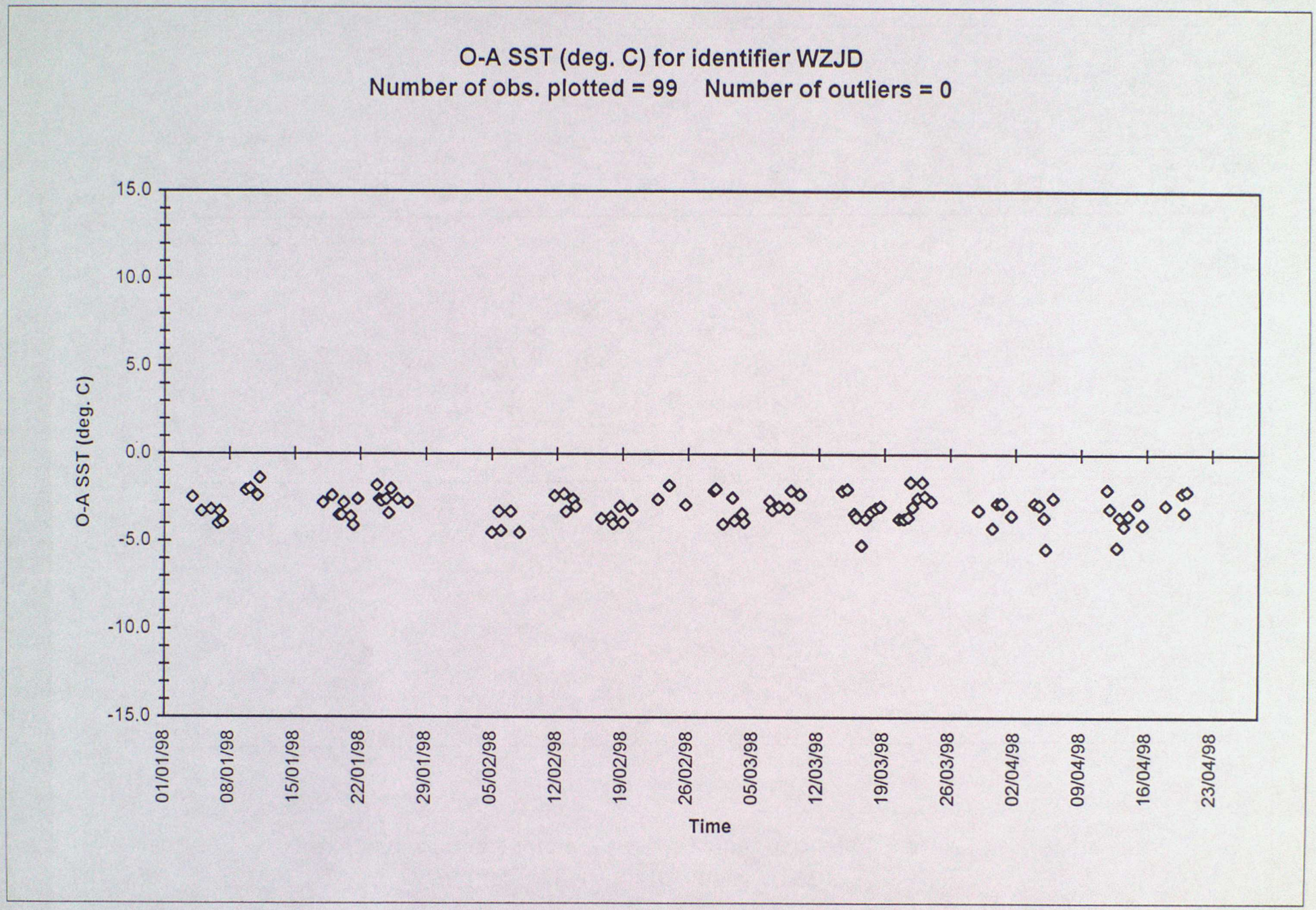

O-A SST (deg. C) for identifier VVFM
Number of obs. plotted = 53 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier WAUU
Number of obs. plotted = 53 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier WPPO
Number of obs. plotted = 53 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier WRYC
Number of obs. plotted = 91 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier WTED
Number of obs. plotted = 148 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98

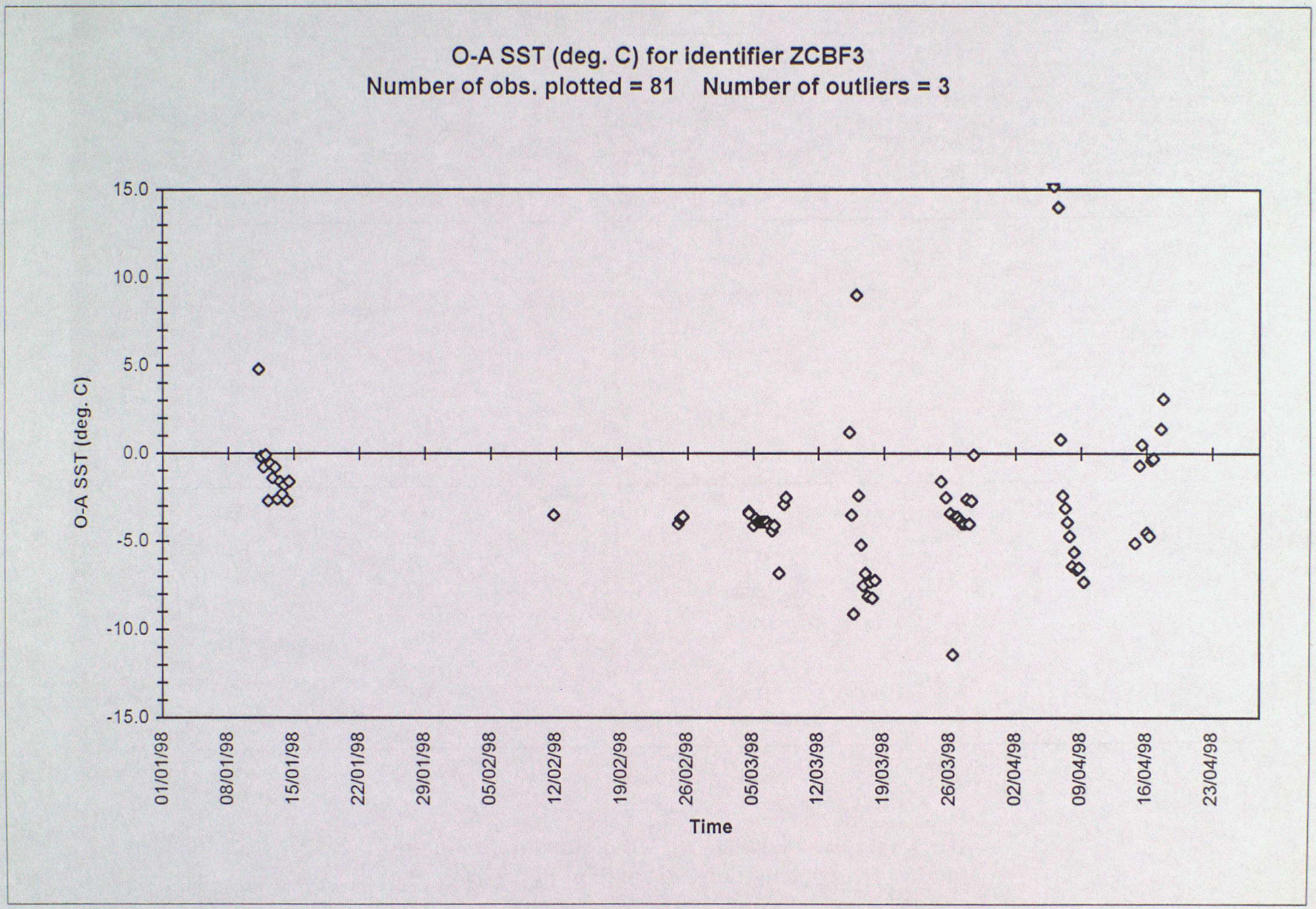

O-A SST (deg. C) for identifier WZJD
Number of obs. plotted = 99 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

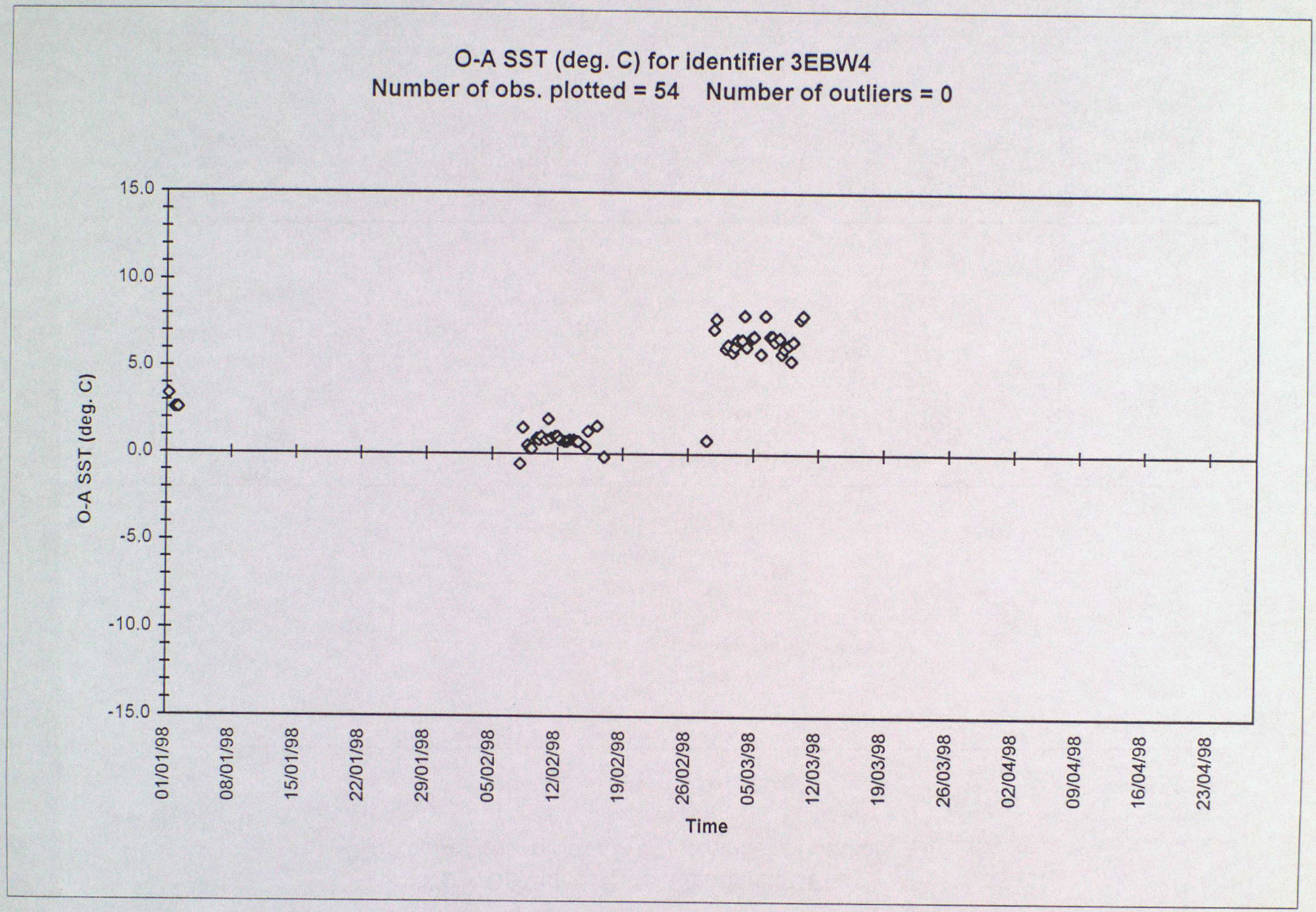
O-A SST (deg. C) for identifier YJQA8
Number of obs. plotted = 151 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

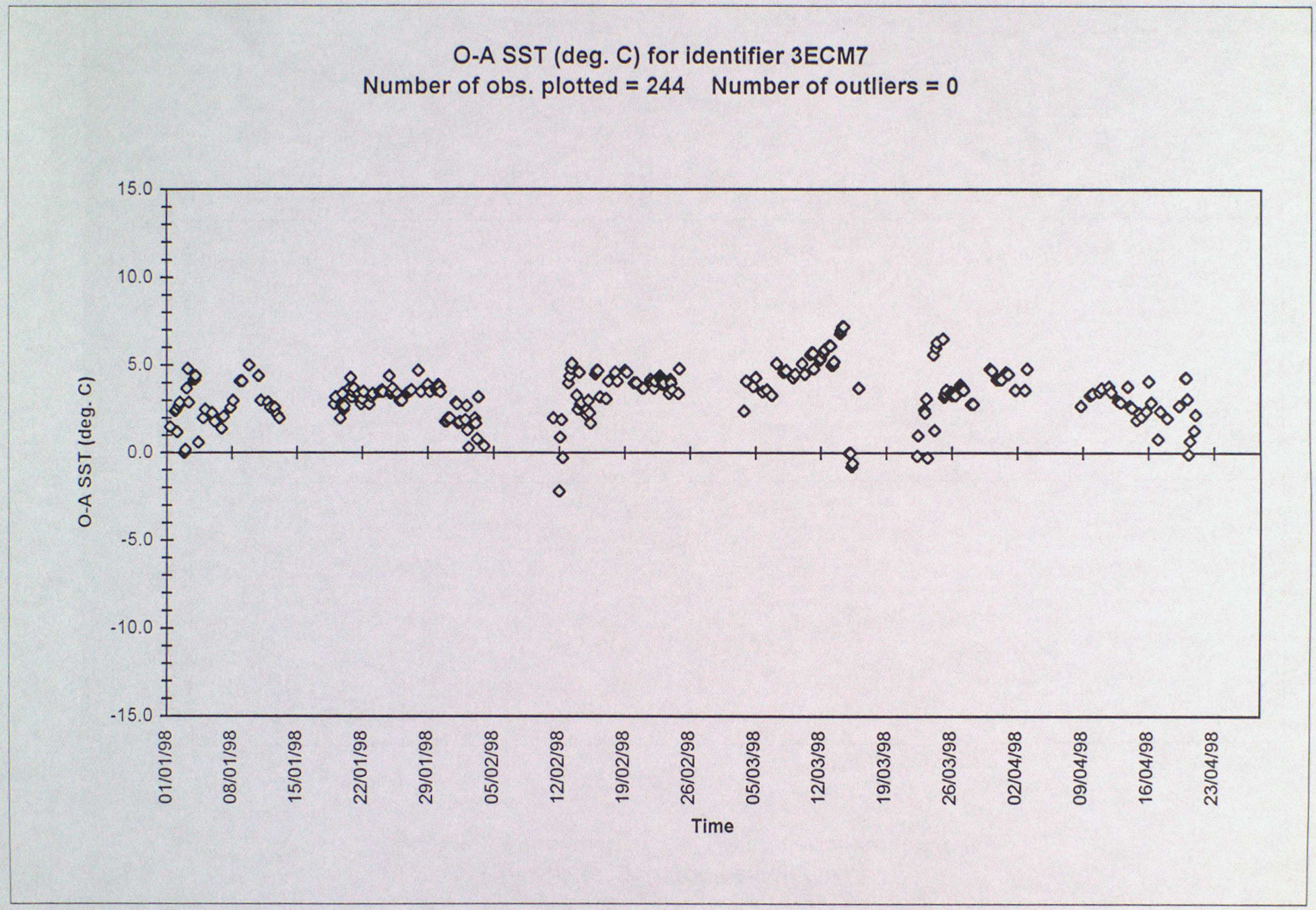
O-A SST (deg. C) for identifier YJYN8
Number of obs. plotted = 43 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

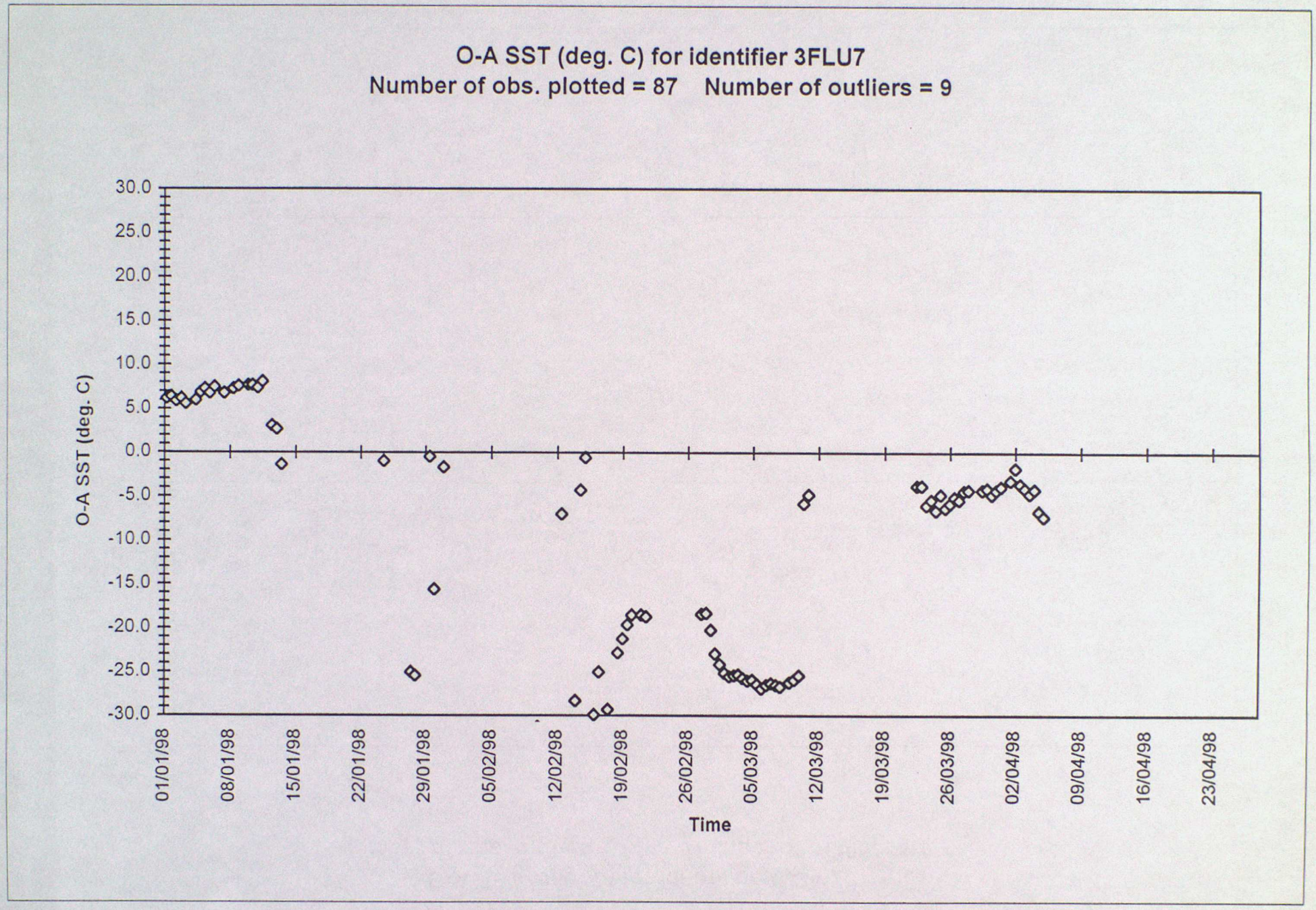
O-A SST (deg. C) for Identifier YJZC5
Number of obs. plotted = 238 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98

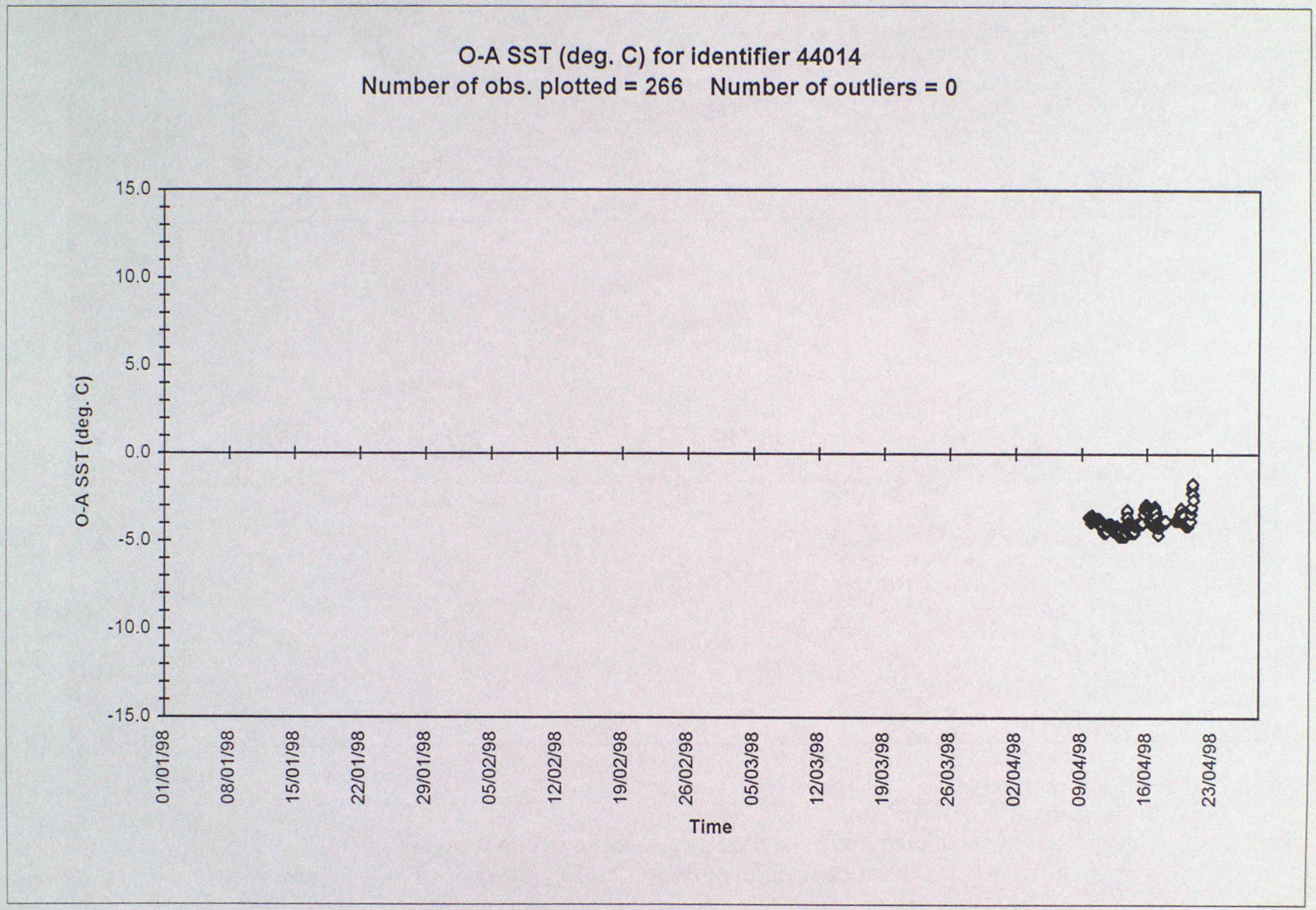
O-A SST (deg. C) for identifier ZCBE7
Number of obs. plotted = 99 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

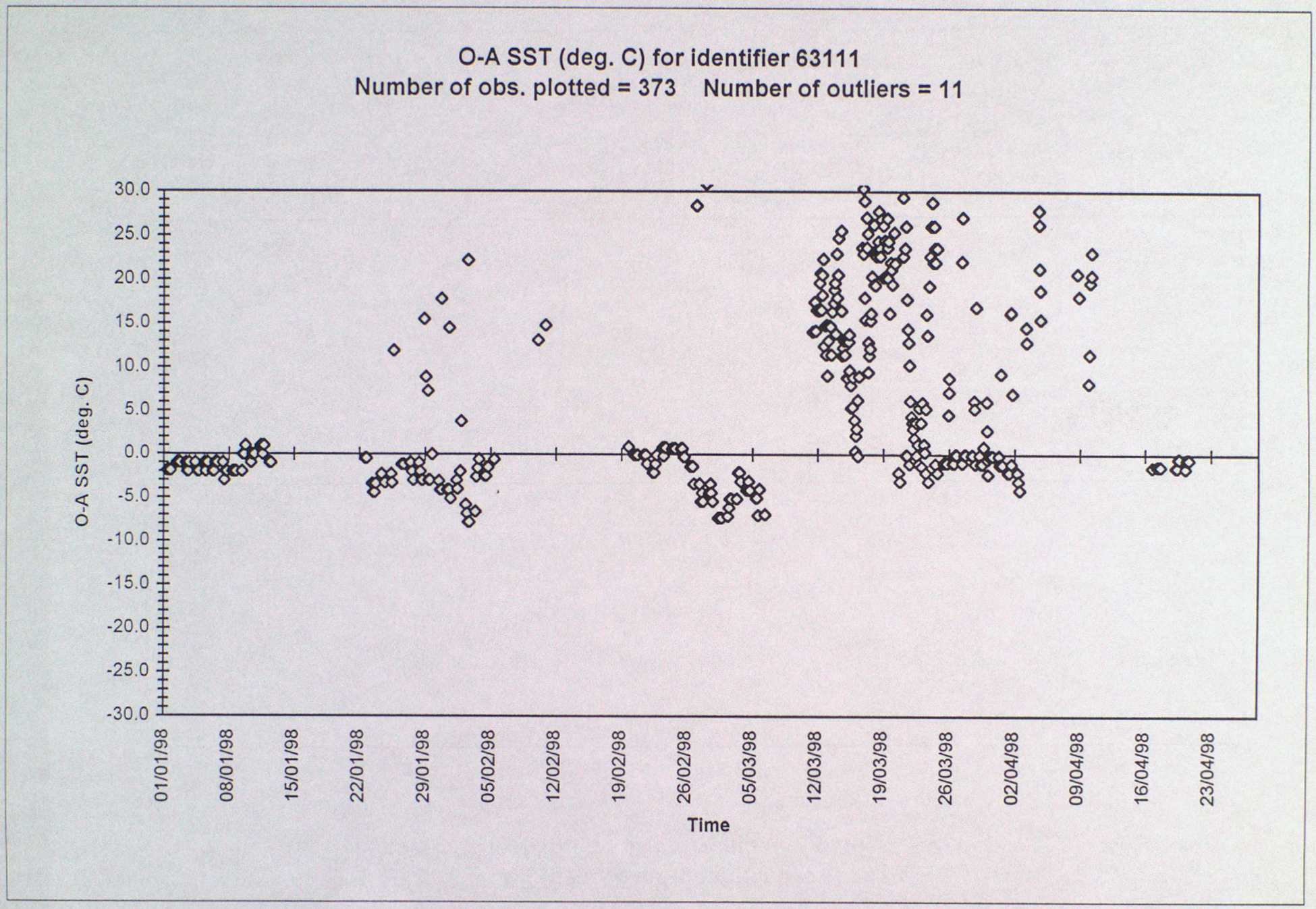

O-A SST (deg. C) for identifier ZCBF3
Number of obs. plotted = 81 Number of outliers = 3
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 3EBW4
Number of obs. plotted = 54 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

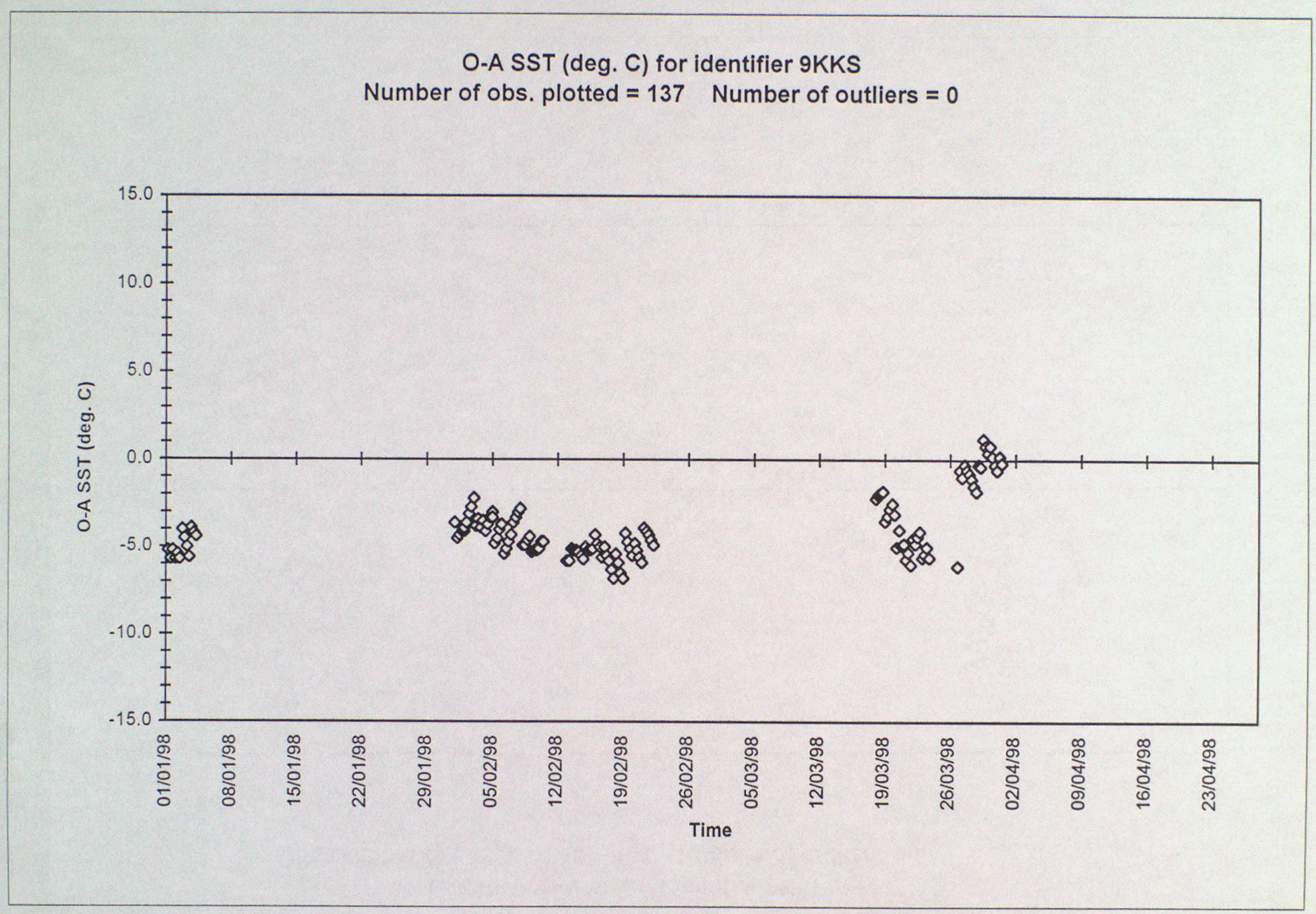

O-A SST (deg. C) for identifier 3ECM7
Number of obs. plotted = 244 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 3FLU7
Number of obs. plotted = 87 Number of outliers = 9
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

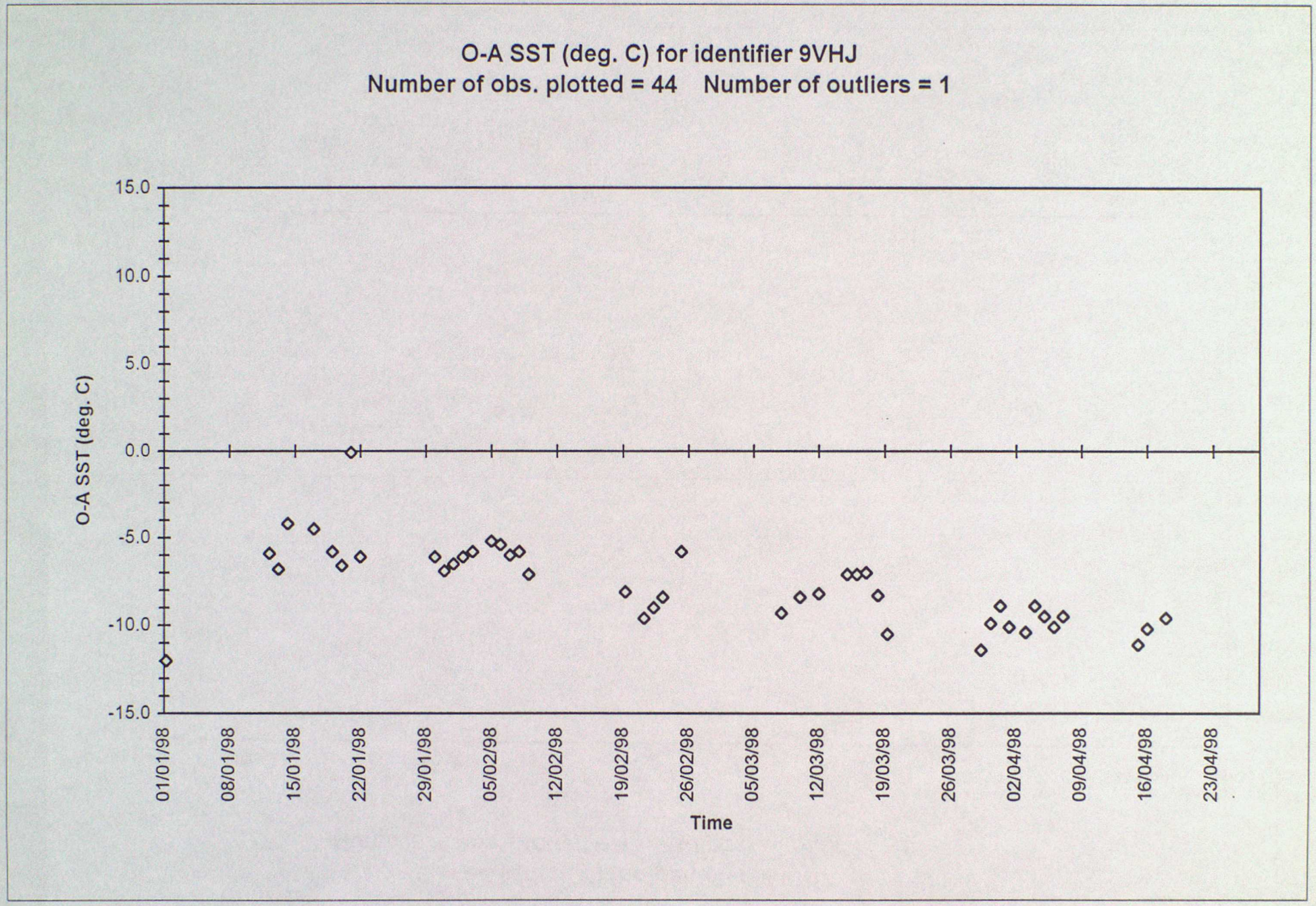

O-A SST (deg. C) for identifier 44014
Number of obs. plotted = 266 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 63111
Number of obs. plotted = 373 Number of outliers = 11
O-A SST (deg. C)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
-20.0
-25.0
-30.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier 9KKF
Number of obs. plotted = 181 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
Time
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98


O-A SST (deg. C) for identifier 9KKS
Number of obs. plotted = 137 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time

O-A SST (deg. C) for identifier 9MBB7
Number of obs. plotted = 49 Number of outliers = 0
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time


O-A SST (deg. C) for identifier 9VHJ
Number of obs. plotted = 44 Number of outliers = 1
O-A SST (deg. C)
15.0
10.0
5.0
0.0
-5.0
-10.0
-15.0
01/01/98
08/01/98
15/01/98
22/01/98
29/01/98
05/02/98
12/02/98
19/02/98
26/02/98
05/03/98
12/03/98
19/03/98
26/03/98
02/04/98
09/04/98
16/04/98
23/04/98
Time